Vol. X,

of the

Botanists Repository

Comprising
Colour'd Engravings
of
New and Rare Plants
ONLY
With Botanical Descriptions &c.
in
Latin and English,
after the
Linnæan System,
by
H. Andrews
Botanical Painter Engraver &c.

G.R. III
BRITISH MUSEUM

PLATE DCIX.

CITRUS MEDICA, *odoratissima.*

Bergamot Lemon.

CLASS XVIII. ORDER III.

POLYADELPHIA ICOSANDRIA. Many Sets of Chives. Threads from the Calyx or Receptacle.

GENERIC CHARACTER.

Calyx 5-dentatus. Corolla 5-petala. Stamina 20 in cylindrum passim connata. Stylus 1. Bacca 9—12-locularis, pulpa vesiculari.	**Cup** 5-toothed. Petals five. Stamens about 20, generally united at the base. Shaft 1. Fruit 9- to 12-celled, the pulp bladdery.

SPECIFIC CHARACTER.

Citrus foliis acuminatis.	**Citrus** with pointed leaves.

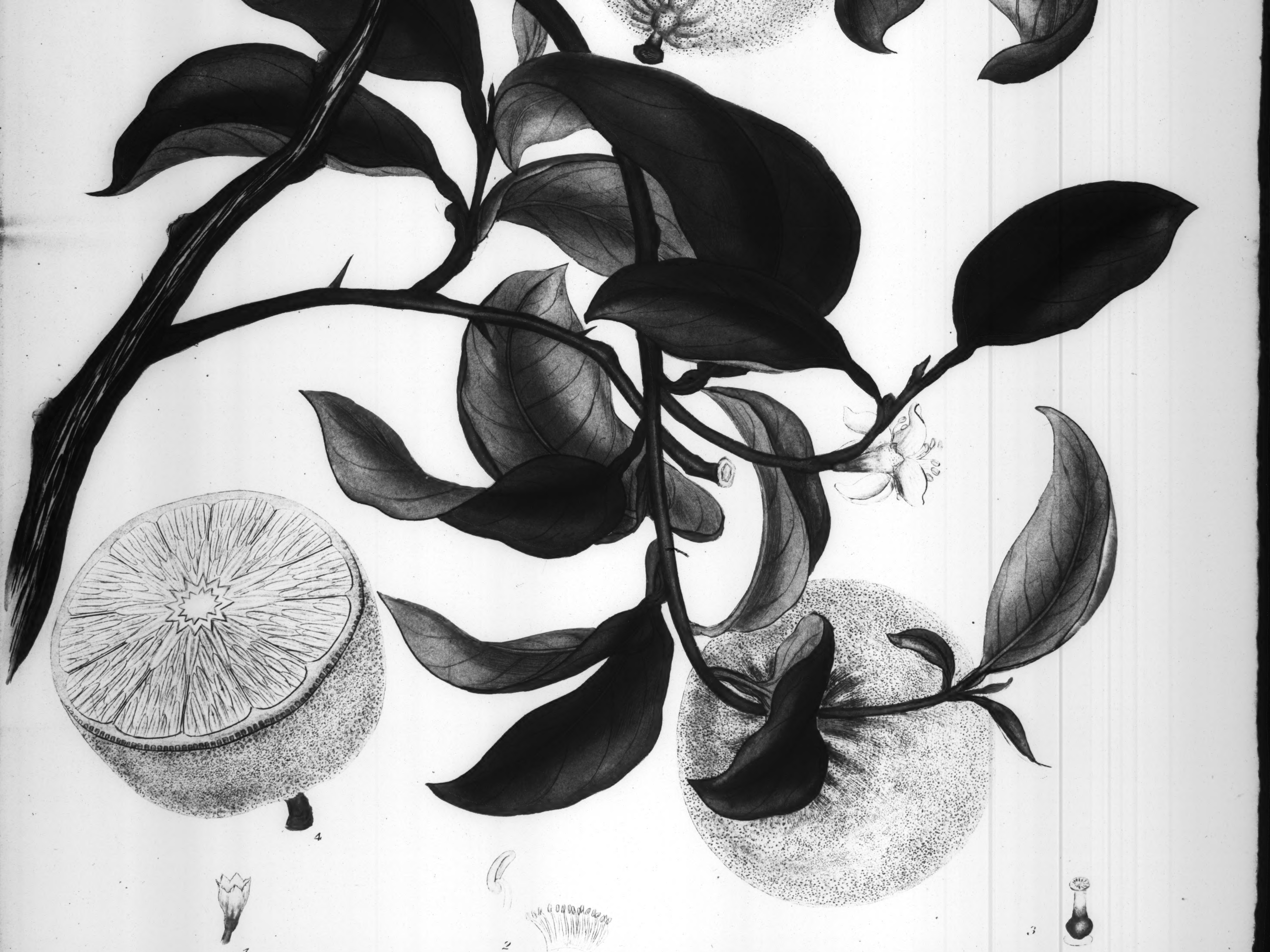
Citrus medica β. *Linn. Sp. Pl.* Limon Bergamotta. *Volkamer. Hesperides, cap.* 26. *tab. p.* 154.

REFERENCE TO THE PLATE.

1. The empalement.
2. Chives spread open.
3. The seed-bud and pointal.
4. A horizontal section of the fruit.

The drawing of this curious and valuable fruit was also taken at Wormleybury last May. Sir Abraham Hume informs us, that the plant was introduced in 1785, by Mrs. Evelyn, of St. Clare in Kent, who brought it with her from Nice. The name Bergamot is said by the Chevalier Lamarck (in the French Encyclopédie) to come from Bergame in Italy, where the principal cultivation of the plant lies. The valuable perfume called Essence of Bergamot is prepared in Italy from the fruit, but by what method they extract it we have not been able to learn: it is rather remarkable that England, so celebrated for her commerce, her collections of natural history, and spirit in gardening, and annually importing so much of this Essence, should have been so long without the plant that produced it.

In arranging the Bergamot for the present as a variety of the Lemon, we by no means subscribe to the opinion of those who, servilely following Linnæus, include all sorts of apples and pears under his *Pyrus mala* and *communis;* all grape-vines under *Vitis vinifera;* and limes, lemons, citrons, oranges and shaddocks of all kinds, under his *Citrus Medica* and *Aurantium.* Already the last-mentioned genus has been considerably illustrated by the works of Gmelin, Rumphius, Thunberg, and Loureiro; and Professor Willdenow now enumerates six species of Citrus, and the Chevalier Lamarck eleven species; and many more are probably yet latent in the unexplored regions of Asia. Indeed it is only to those who have an opportunity of observing them in their original situations, where the spade of the labourer has never disturbed their repose, that we must look for their complete illustration. The immense tracts on our northern hemisphere, over which apples are naturally scattered, as well as the vast and permanent differences observed in their fruits, give us also much to hope for; even Linnæus himself observes in his Flora Suecica, that the apple which he found growing naturally in Smoland was very different from that which he found in other parts of Sweden; the original Paradise-apple (*Malus pumila* of the old authors) has already been recovered by the Russian naturalist Pallas, forming large thickets on the banks of the Wolga and Tanais, (see his Flora Rossica, vol. i. p. 22.); and the same author informs us that the apples he found growing about the Terek were of a large size, and excellent even in their wild state; while those that he met with in other parts of Russia were quite worthless. Even in India our indefatigable countryman Dr. Buchanan has discovered five original species of this genus (one of them a quince) growing naturally on the elevated regions towards the snowy mountains. His descriptions of them, however, are yet unpublished, but we have seen his specimens in the collection of A. B. Lambert, esq.



Citrus Medica [illegible]

Pl. 59.

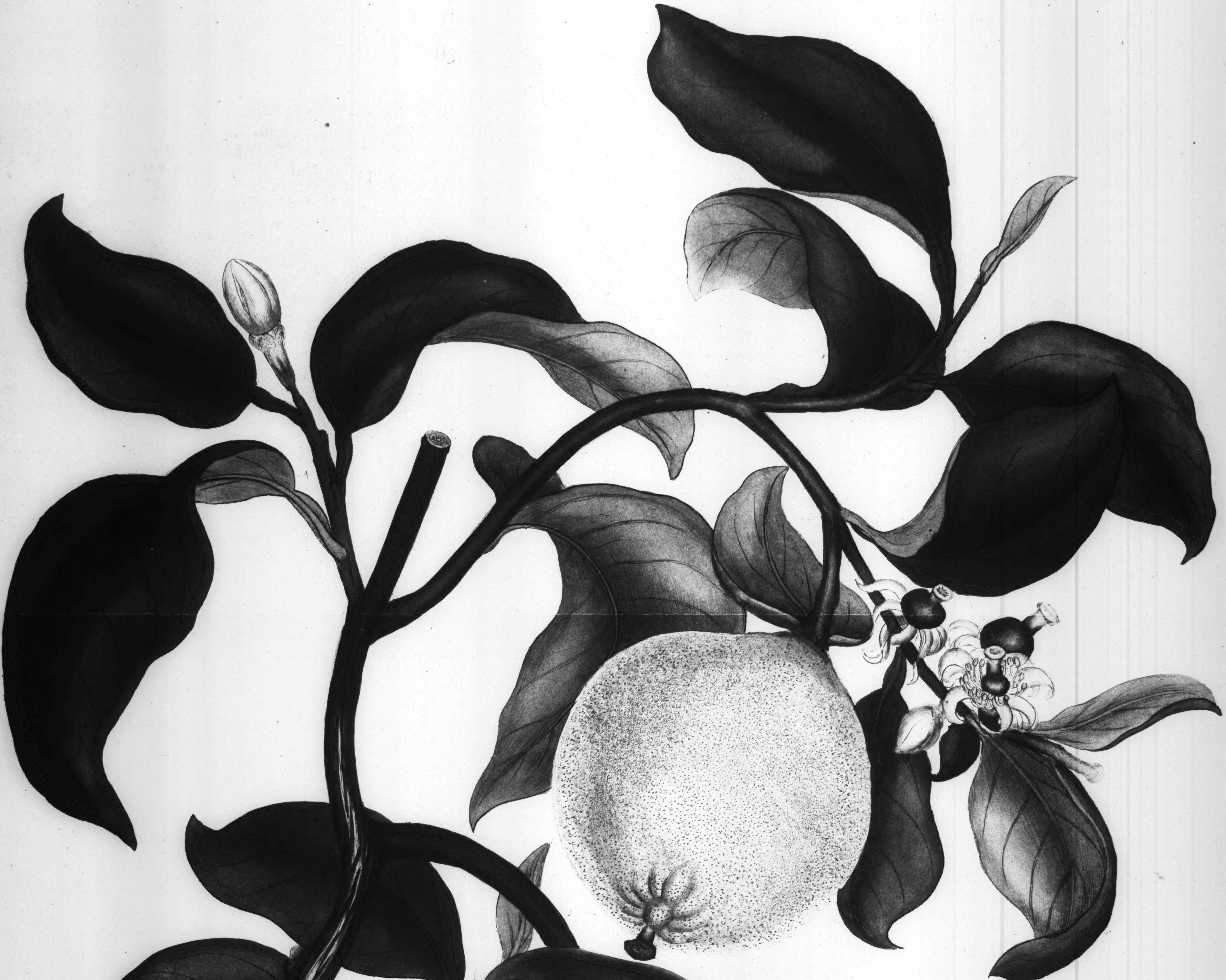


PLATE DCX.

RUELLIA FORMOSA.

Beautiful Ruellia.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

Calyx 5-partitus. Corolla 1-petala, limbo inæquali 5-lobo. Capsula bilocularis, bivalvis, dentibus elasticis dissiliens.	**Cup** 5-parted. Blossom of one petal, with the limb unequally 5-lobed. Fruit a two-celled, two-valved capsule bursting with elastic teeth.

SPECIFIC CHARACTER.

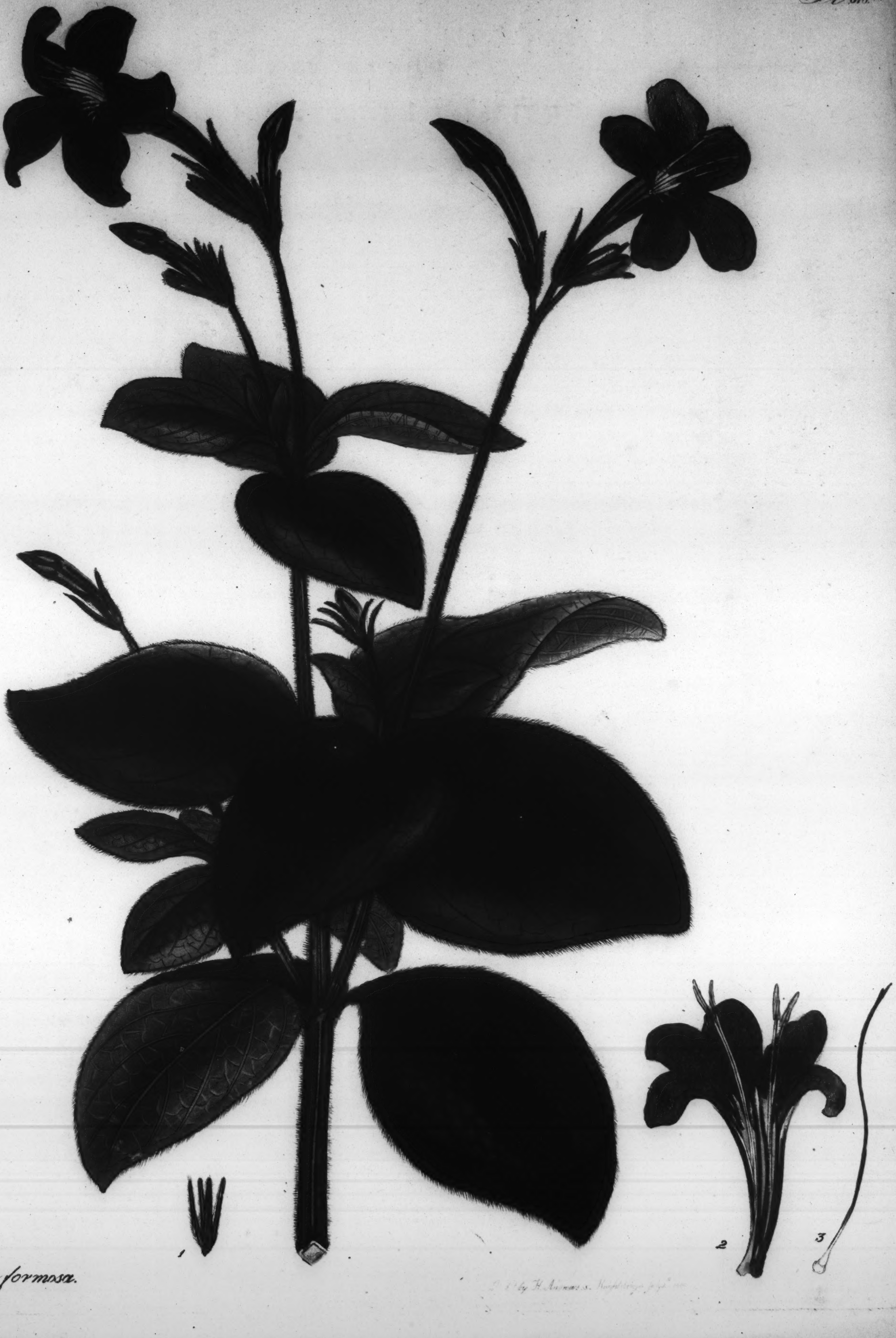
Ruellia caule suffruticoso erecto; foliis pilosis, petiolatis, integerrimis, ovatis, obtusis; pedunculis lateralibus foliis duplo seu triplo longioribus, ramosis; ramulis subtrifloris.	**Ruellia** with a suffruticose erect stem; hairy, entire, oval, blunt leaves upon footstalks; the flower-stalks twice or thrice as long as the leaves and branched; the branches three-flowered.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. The seed-bud and pointal.

For this very elegant species we are indebted to Mr. Donn, Curator of the Botanic Garden at Cambridge, who informs us that it is a native of Brazil, and was introduced from Portugal in 1808 by sir Charles Cotton, bart. The plant in the Cambridge garden is now nearly four feet high, with many branches, and has continued flowering profusely since the beginning of May, and appears as if it would continue to blossom during the summer. It is propagated by cuttings, and has as yet been kept in the hothouse.

We have found no figure or description of the plant in any author, but have seen a very fine dried specimen of it brought from Portugal by sir Thomas Gage, bart. in the herbarium of A. B. Lambert, esq. with this note affixed: "I found this Ruellia growing, and ripening seeds abundantly, amongst the hothouse-plants in the Botanic-Garden at Lisbon." So ornamental a plant we trust will soon be equally abundant in the hothouses of our own country.



Ruellia formosa.

Pubd by H. Andrews. Knightsbridge Sept.

PLATE DCXI.

DAVIESIA CORYMBOSA.

Corymbed Daviesia.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

Calyx angulatus, simplex, quinquefidus. Corolla papilionacea. Stylus subulatus. Stigma simplex, acutum. Legumen compressum, monospermum.	**Cup** angled, simple, 5-cleft. Blossom butterfly-shaped. Shaft awl-shaped. Summit simple, acute. Pod compressed, one-seeded.

SPECIFIC CHARACTER.

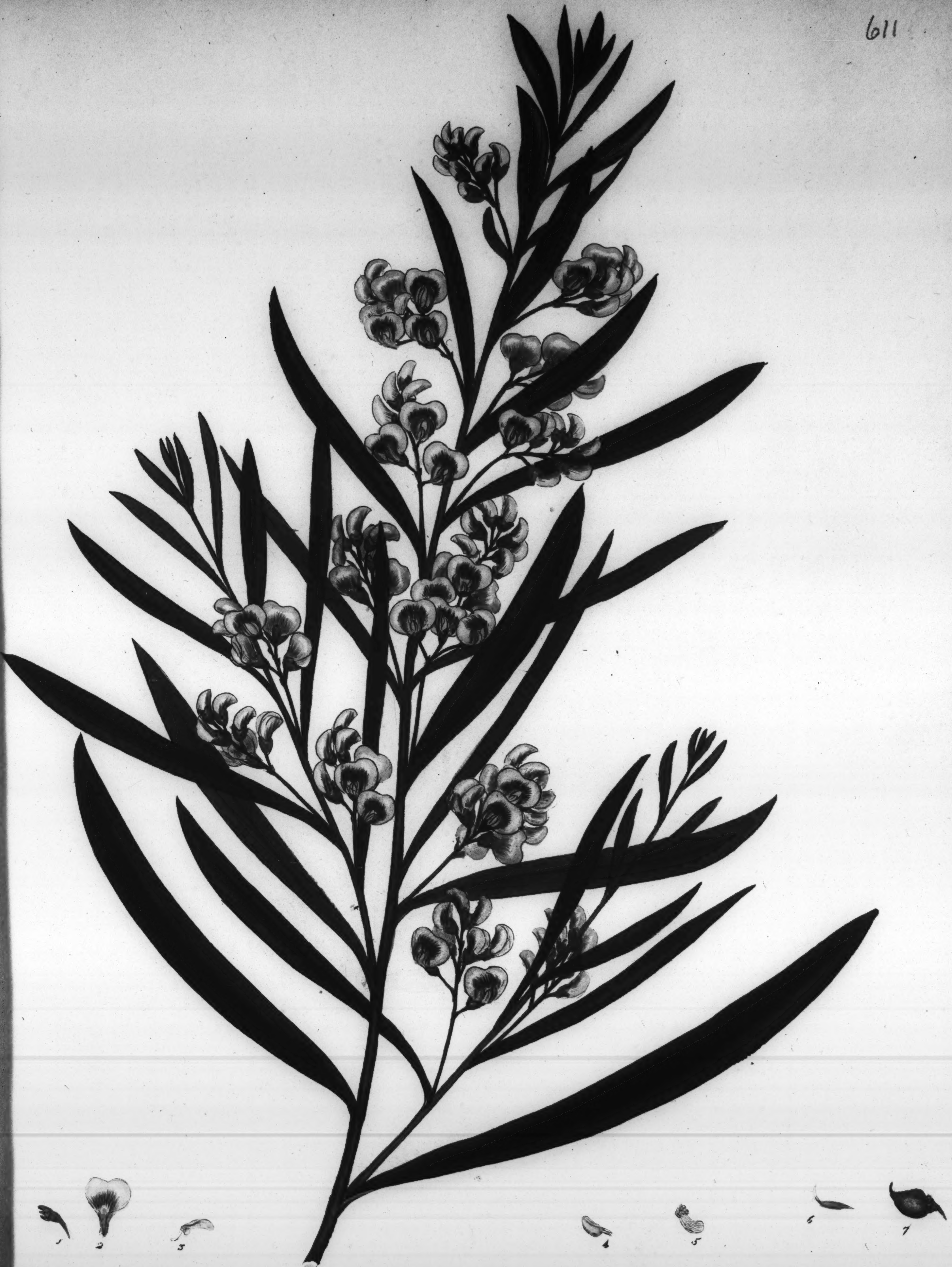
D. corymbosa, foliis lineari-oblongis, planis, muticis; pedunculis axillaribus, geminis, corymbosis, multifloris; calyce regulari. *Smith in the Transactions of the Linnean Society, vol. 8. p. 258.*

REFERENCE TO THE PLATE.

1. Empalement.
2. The standard.
3. One of the wings.
4. The keel.
5. The chives and pointal.
6. The seed-bud and pointal.
7. A half-ripe seed-vessel.

This showy species is a native of New Holland, and was raised from seed by Mr. Gibbs, last year, in his nursery at Brompton, and is not as yet, we believe, in any other collection.

It may not be improper to observe, that the calyx of this species appears a little bilabiate, and the germen two-seeded, although one of the seeds in the fruits we have examined was always abortive.



Daviesia corymbosa

PLATE DCXII.

PÆONIA ALBIFLORA, *flore pleno.*

Tartarian Pæony, double-flowered variety.

CLASS XIII. ORDER II.—V.

POLYANDRIA DIGYNIA ad PENTAGYNIAM. Many Chives. Two to Five Pointals.

GENERIC CHARACTER.

Calyx 5-phyllus. Petala 5. Styli 0. Capsulæ polyspermæ.	Cup five-leaved. Petals 5. Shafts none. Capsules many-seeded.

SPECIFIC CHARACTER.

Pæonia foliis biternatis, foliolis ovato-lanceolatis integris nudis, capsulis recurvatis glabris. *Willd. Sp. Pl. vol. 2. p.* 1222.

REFERENCE TO THE PLATE.

1. The empalement and pointals.

The single-flowered Pæonia albiflora we have already figured in our first volume (Plate 64.), but never heard of the double variety until we found it in the nursery of Mr. Whitley, who informs us that he raised the plant from seeds received from Mr. Livingstone, surgeon, (in 1808,) who brought them from China under the title of the yellow Pæony. It bloomed last year with only three flowers, but has this year produced five elegant blossoms. Its great beauty certainly entitles it to a place in every flower-garden and curious collection. We shall only add to our former account of this fine species of Pæony above referred to, that Professor Pallas mentions in his Flora Rossica that the roots are used as food in Mongolia, where the plant grows naturally wild, being boiled and eaten by the Tartars, who also powder the seeds to mix with their tea.

Pl. 612

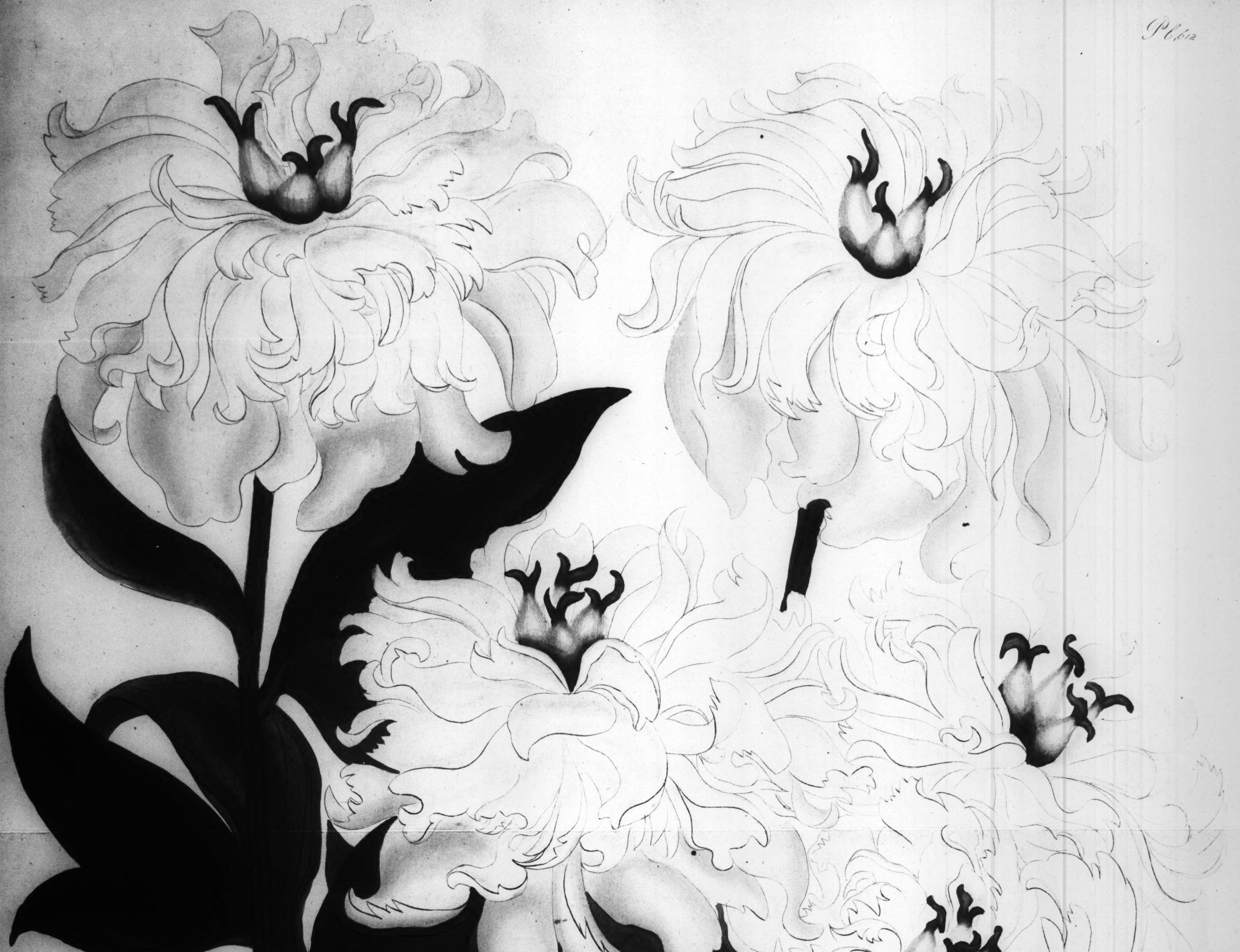


PLATE DCXIII.

IPOMŒA pendula.

Pendulous Ipomœa.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Stamens. One Style.

GENERIC CHARACTER.

Calyx quinquepartitus. Corolla infundibuliformis. Stigma capitato-globosum. Capsula 2- seu 3 locularis.

Cup five-parted. Blossom funnel-shaped. Stigma with a roundish head. Capsule of 2 or 3 cells.

SPECIFIC CHARACTER.

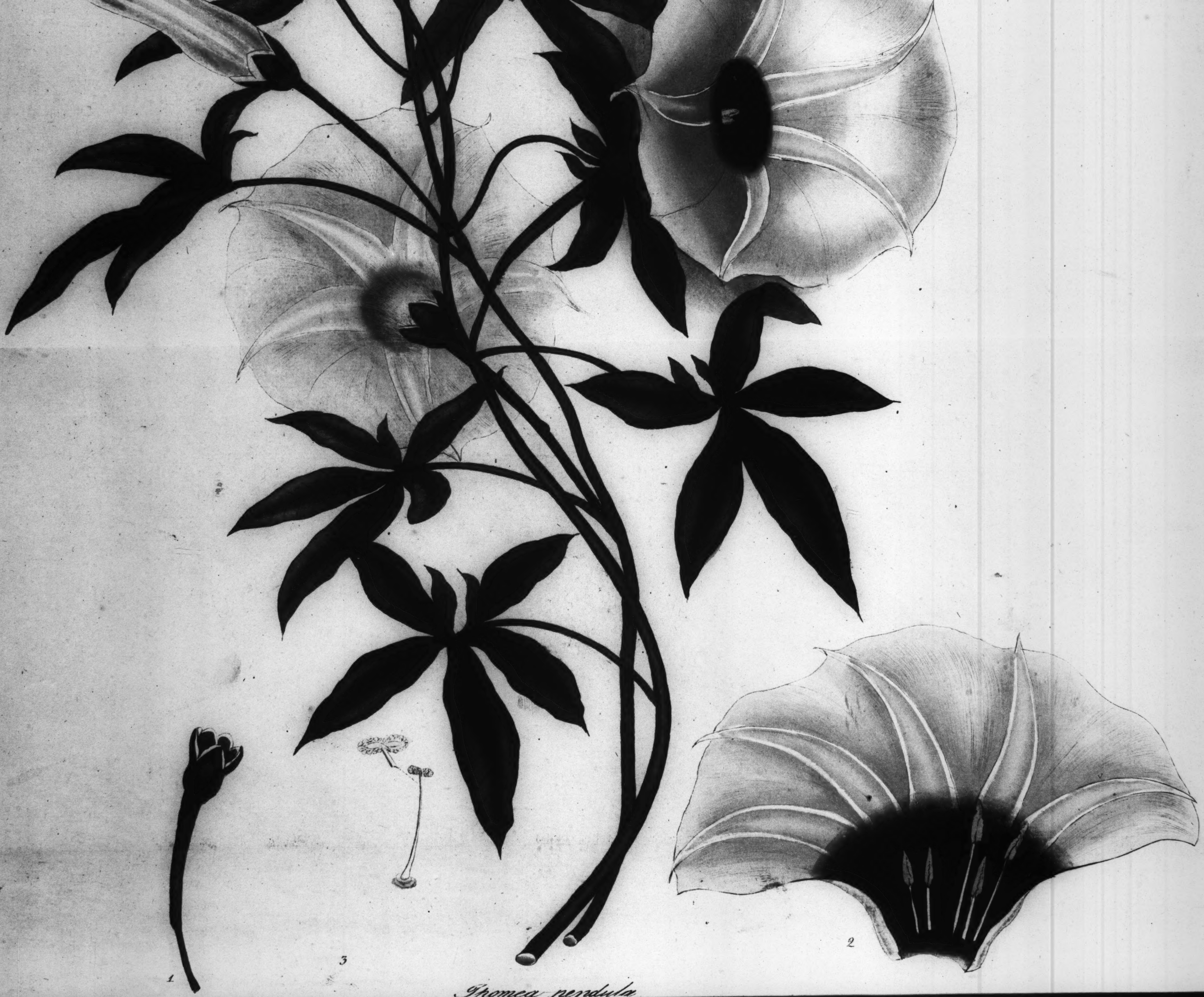
Ipomœa pendula, glabra, foliis quinato-digitatis: foliolis lanceolatis, mucronulatis, margine integerrimis; extimis indivisis bifidisve: pedunculis 1—3-floris: calycis foliolis subæqualibus, obtusis, tubo corollæ ter brevioribus. *Brown Prod. Nov. Holl. et Ins. Van-Diem. vol.* 1. *p.* 486.

Pendulous Ipomœa with smooth five-fingered leaves: the divisions lanced, sharp-pointed, and entire at the edge; the lowermost being sometimes two-cleft: the peduncles one- to three-flowered: leaflets of the cup nearly equal, blunt, three times shorter than the tube of the blossom.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. Seed-bud and pointal, summit magnified.

This very ornamental species of Ipomœa is a native of the north and east coasts of New Holland, according to Mr. Brown's Prodromus of the plants of that country above quoted. We have seen wild specimens of it gathered by Dr. White near Port Jackson. The species is so decidedly volubilous as not only to twine round other plants that may come in its way, but twists also its own shoots round each other; and this both in its wild and cultivated state. Towards the root it appears to be woody, and is certainly perennial. The drawing was taken about the middle of July, in the curious collection of the Countess de Vandes at Bayswater, from a plant about five feet high, which was probably the first time the species blossomed in this country. The introducer we have not been able to discover.



Ipomea pendula

Pl 613

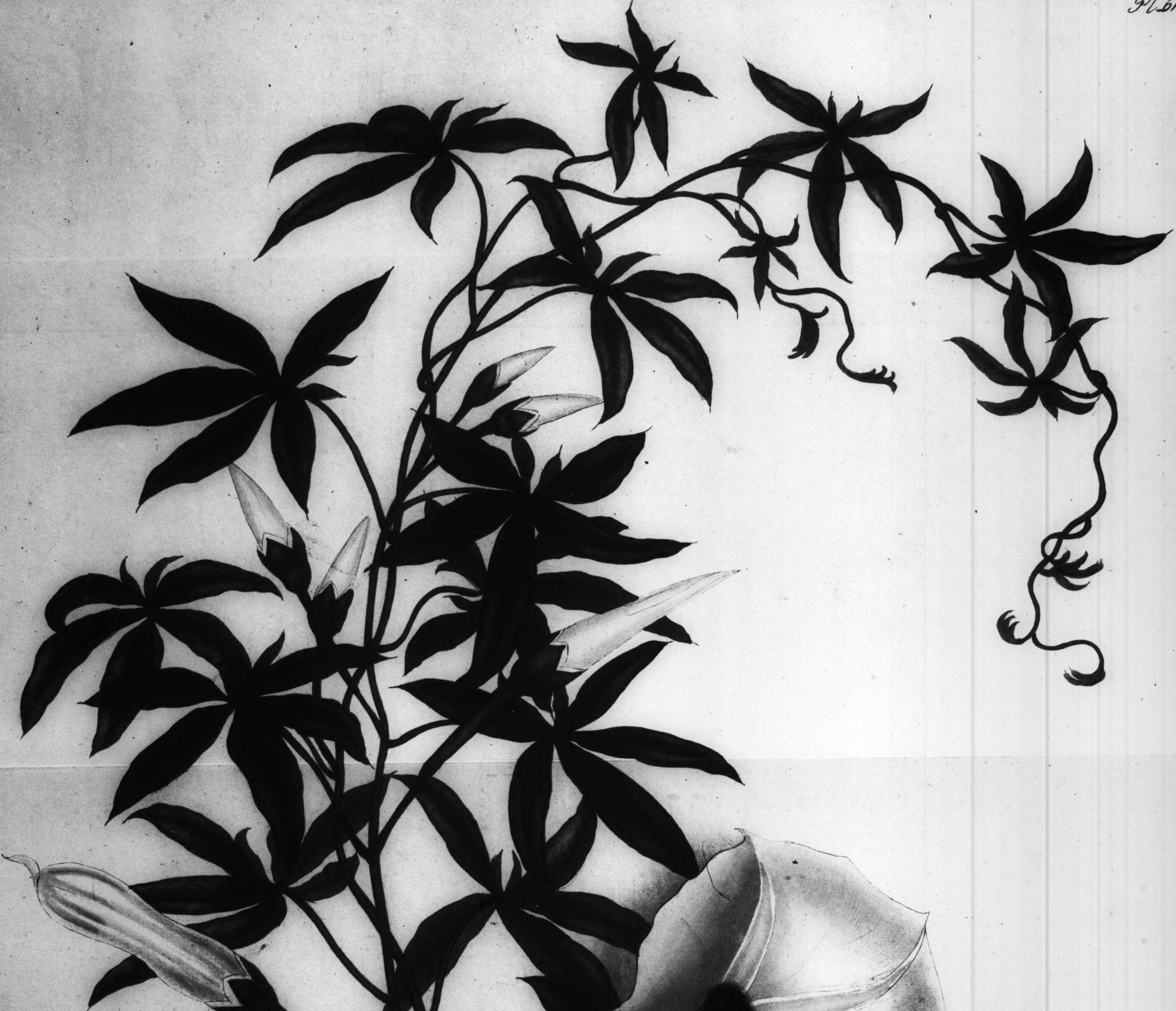


PLATE DCXIV.

FUMARIA NOBILIS.

Noble Fumitory.

CLASS XVI. ORDER II.

DIADELPHIA HEXANDRIA. Two Brotherhoods. Six Stamens.

GENERIC CHARACTER.

Calyx diphyllus. Corolla ringens. Filamenta 2, membranacea, singula antheris tribus.	**Cup** two-leaved. Blossom gaping. Filaments two, membranaceous, each supporting three anthers.

SPECIFIC CHARACTER.

Fumaria caule simplici, racemo terminali, bracteis oblongis acutis flore brevioribus, foliis pinnatis, foliolis subtripartito-laciniatis. *Willd. Sp. Pl. vol.* 3. *p.* 858.	**Fumitory** with a simple stem, a terminal bunch of flowers, with oblong acute bracts shorter than the blossoms, and pinnate leaves with the leaflets jagged and three-parted.

REFERENCE TO THE PLATE.

1. A flower.

The Fumaria nobilis is a native of the Altaian mountains in Siberia, and was introduced to this country in the year 1783 by Mr. John Græffer, but appears to have been since lost, as we never saw living specimens until the beginning of last May, when that from which our drawing was taken was communicated by Mr. Donn from the Botanic garden at Cambridge. The plant appears well calculated for ornamenting rock-work or curious borders, the finely cut foliage and flowers being both very graceful. It is said to have been a great favourite with Linnæus.

Pl, 619 4

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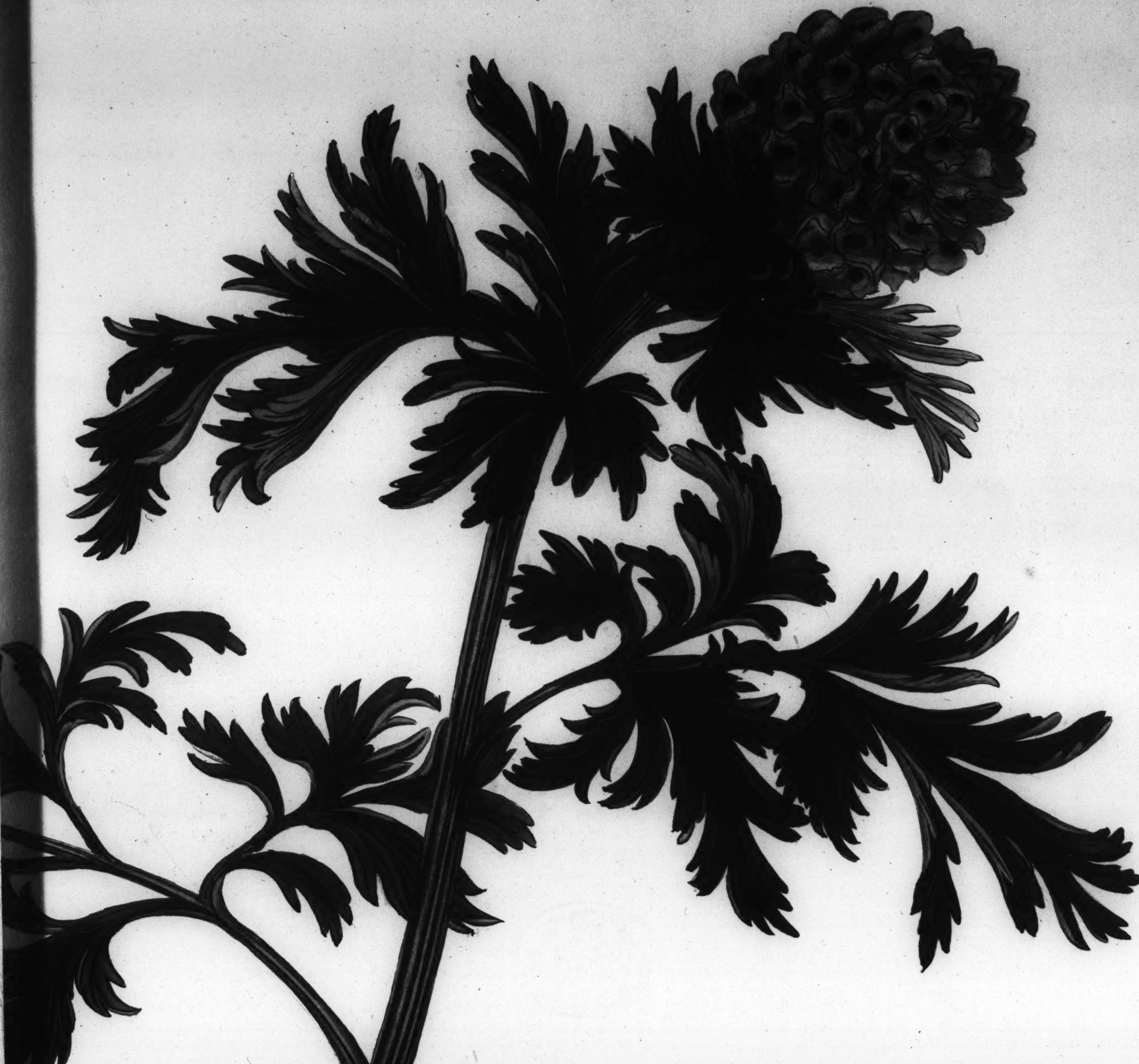


Fumaria, nobilis

PLATE DCXV.

GLOBBA PURPUREA.

Purple Globba.

CLASS I. ORDER I.

MONANDRIA MONOGYNIA. One Stamen. One Style.

GENERIC CHARACTER.

Anthera duplex. Filamentum lineare, incurvatum, longissimum, appendiculatum. Stylus laxus filiformis in medio antheræ receptus. Stigma incrassatum. Nectarium utrinque bifidum. *Roscoe in the Transactions of the Linnean Society, vol.* 8. *p.* 355.

Anthers double. Filament linear, incurved, very long and appendaged. Style (or shaft) long thread-shaped, going up between the anthers. Stigma (or summit) swelling. Nectary cleft at both ends.

SPECIFIC CHARACTER.

Globba scapo aphyllo paniculato; bracteis calyce multo longioribus subovatis, corollâ trilobâ, filamento medio biappendiculato, nectario cordato-oblongo.

Globba with a leafless panicled stem, the bracts many times longer than the cup and nearly ovate, the blossom of three lobes, the filament with two appendages in the middle, and the nectary between a heart-shape and an oblong.

REFERENCE TO THE PLATE.

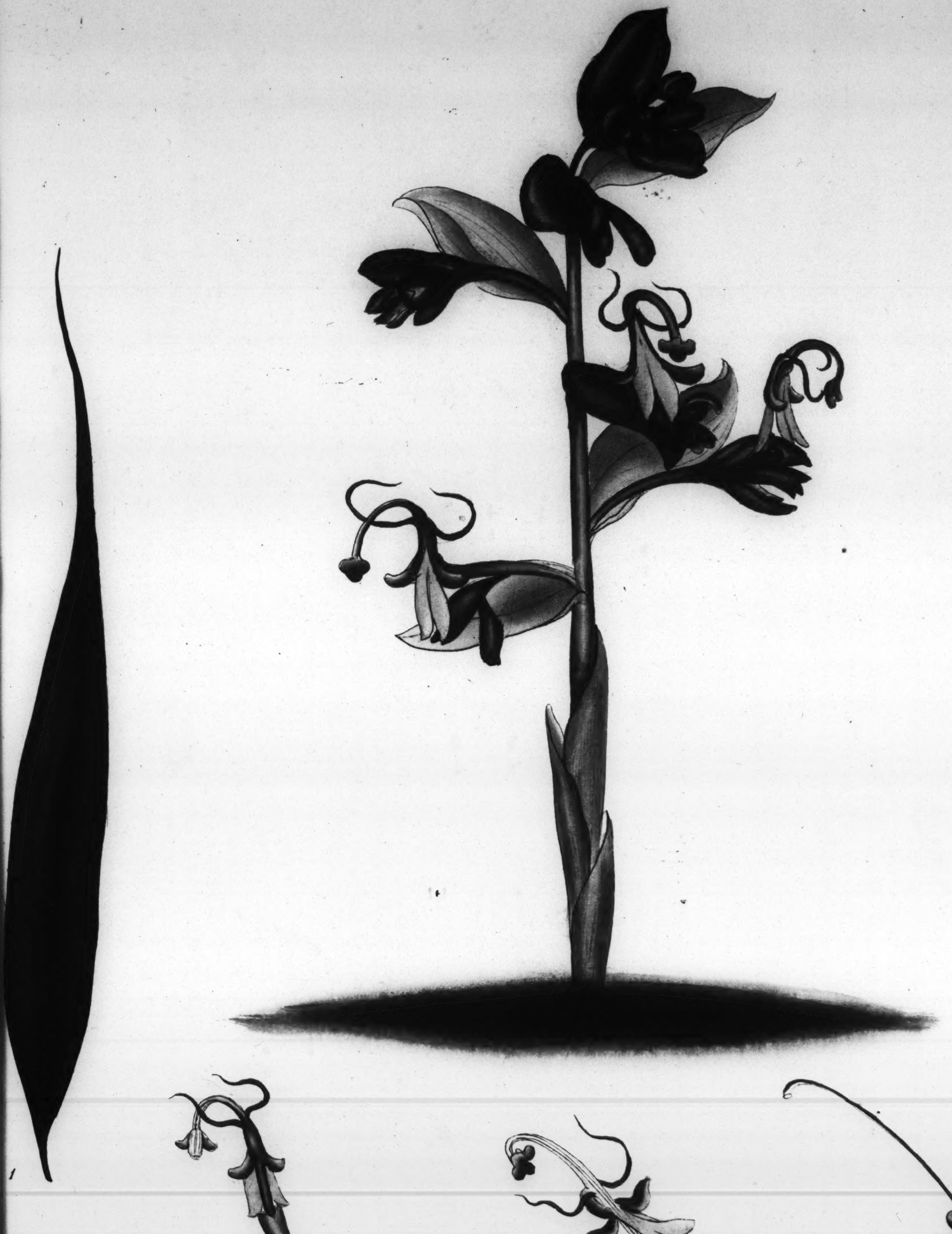
1. A leaf.
2. A flower.
3. A front view of the same divested of the calyx.
4. Empalement, seed-bud, and pointal.

No genus of plants has more puzzled botanists than the Globba of Linnæus, no plant having yet been discovered that agrees with his generic character; but as the possessor of his herbarium has decided that the Globba marantina, the only species of this genus Linnæus professes to have seen, was the same plant with that called by Dr. Roxburgh, and also by Mr. Donn in his Catalogue of the Cambridge Botanic Garden, Colebrookia bulbifera; (see Smith's Exotic Botany, page 85, where he has corrected the generic character;) this plant, also sent from India by Dr. Roxburgh to Sir Abraham Hume, bart. in 1809, now also changes its name to Globba. The inflorescence, which is directly from the root, whilst in all the species described by Dr. Smith it is placed above the leaves on a common stem, together with the three-lobed corolla, might doubtless be quite sufficient characters to distinguish it as a separate genus; but another having already been published in honour of Mr. Colebrook, we prefer leaving it with the congeners amongst which it was originally placed by its discoverer Dr. Roxburgh.

The delicacy and elegance of the whole plant, the rich tint of the floral leaves, and the curious construction of the blossoms, (where the long projecting filament drawn back by the style which is held by its summit protruded beyond the anthers, at one period of the inflorescence nearly resembles a half-bent bow,) have been admired by all who have seen it. The leaves only appear as the flowers decay.

The plant blossomed in the middle of last May, for the first time in this country, in the collection of Sir Abraham Hume, bart. where our drawing was taken. From a very useful manuscript catalogue of Indian plants by Dr. Roxburgh in the collection of A. B. Lambert, esq. we learn that it is a native of India, and has been found growing wild about Chittagong.

The ripe fruit we have not seen; but the germ is nearly oval, with three blunt angles and of one cell with many seeds affixed to three lateral receptacles. The plant is perennial, and may be propagated by the roots like other scitamineous plants.



Globba, purpurea

[illegible] Aug.t 1 1810 by [illegible]

PLATE DCXVI.

EUPHORBIA epithymoides.

Broad-leaved Spurge.

CLASS XI. ORDER III.

DODECANDRIA TRIGYNIA. Twelve to Nineteen Stamens. Three Styles.

GENERIC CHARACTER.

Calyx monophyllus, ventricosus. Corolla 4- seu 5- petala calyci insidens. Capsula tricocca.	Cup of one leaf, bellying. Blossom of 4 or 5 petals sitting upon the cup. Fruit a capsule with 3 cells.

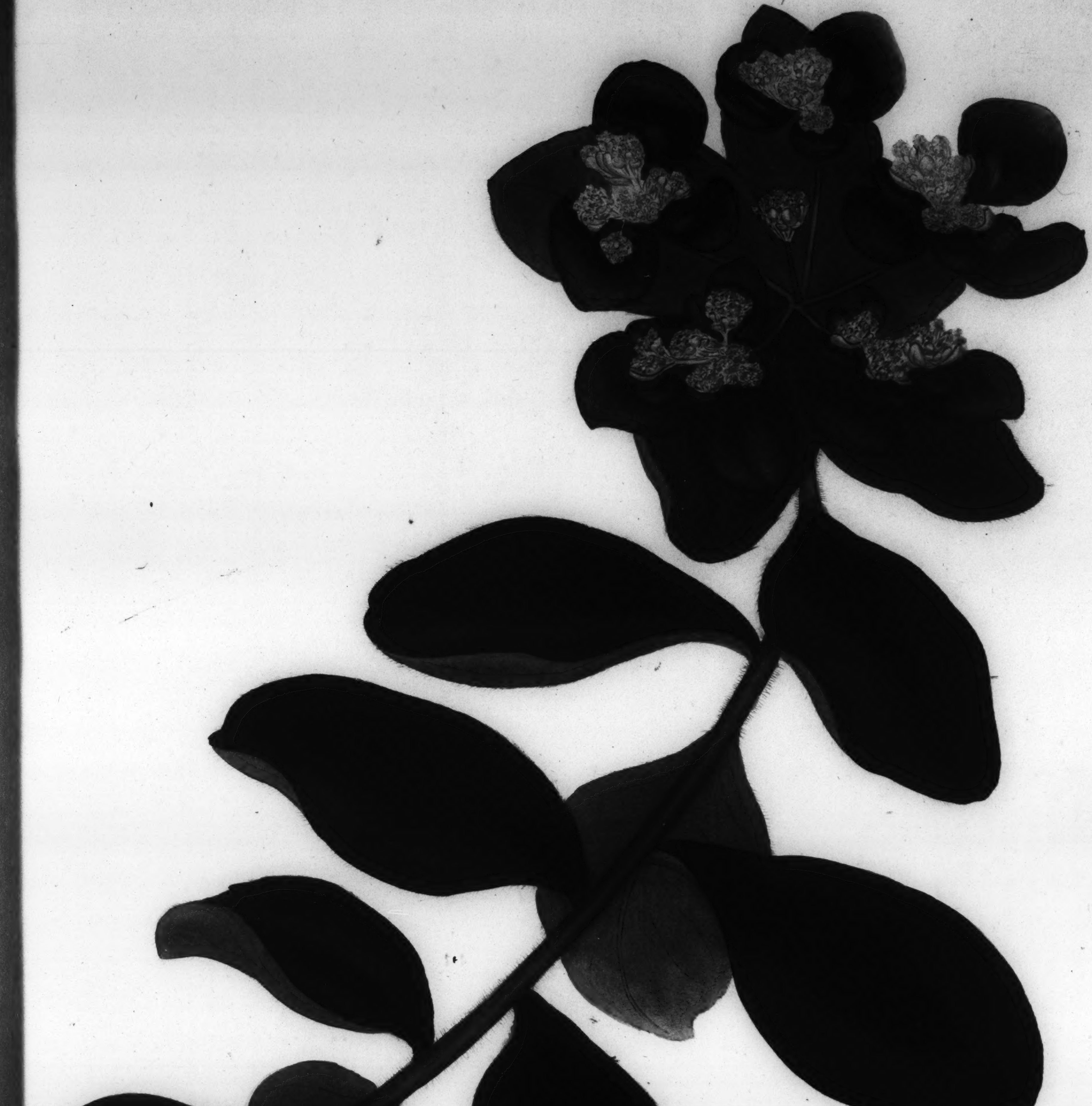
SPECIFIC CHARACTER.

Euphorbia umbellâ quinquefidâ, radiis subbifidis, involucellis ovatis denticulatis, foliis integerrimis lanceolatis obtusis retusis subtus villosis, capsulis papilloso-hispidis. *Willd. Sp. Pl. vol. 2. p. 909.*	Euphorbia with a five-cleft umbel, the rays mostly bifid, the involucrets ovate-toothed, the leaves entire, lanced, blunt, retuse and woolly beneath; the capsules with little warts and bristly.

REFERENCE TO THE PLATE.

1. A flower.
2. The same spread open.
3. Seed-bud and pointal.

This ornamental species is a native of Austria, and was introduced, according to Donn's Catalogue, in the year 1805. Professor Jacquin has given an excellent figure and description of it in its wild state in his Flora Austriaca, vol. iv. p. 23, tab. 344: but it varies very considerably when cultivated, as may be seen by comparing the figures. The figure cited to the species by Linnæus, from Columna, and from which it also derives its name, as already remarked by Jacquin, (who was certain of the identity of his species with the Linnean,) has very little resemblance to the plant; but the name of epithymoides, however apt to mislead, is now sanctioned by so long use, that were the plant of Columna discovered, and proved to be different, one would hardly venture now to restore to it its original appellation. The specimen was communicated by Mr. Donn last May from the Botanic Garden at Cambridge.



Euphorbia Epithymoides

PLATE DCXVII.

EUPHORBIA meloformis.

Melon-shaped Euphorbia.

CLASS XI. ORDER III.

DODECANDRIA TRIGYNIA. Twelve to Nineteen Stamens. Three Styles.

GENERIC CHARACTER.

Calyx monophyllus, ventricosus. Corolla 4- seu 5-petala calyci insidens. Capsula tricocca.	Cup of one leaf, bellying. Blossom of 4 or 5 petals sitting upon the cup. Fruit a capsule with 3 cells.

SPECIFIC CHARACTER.

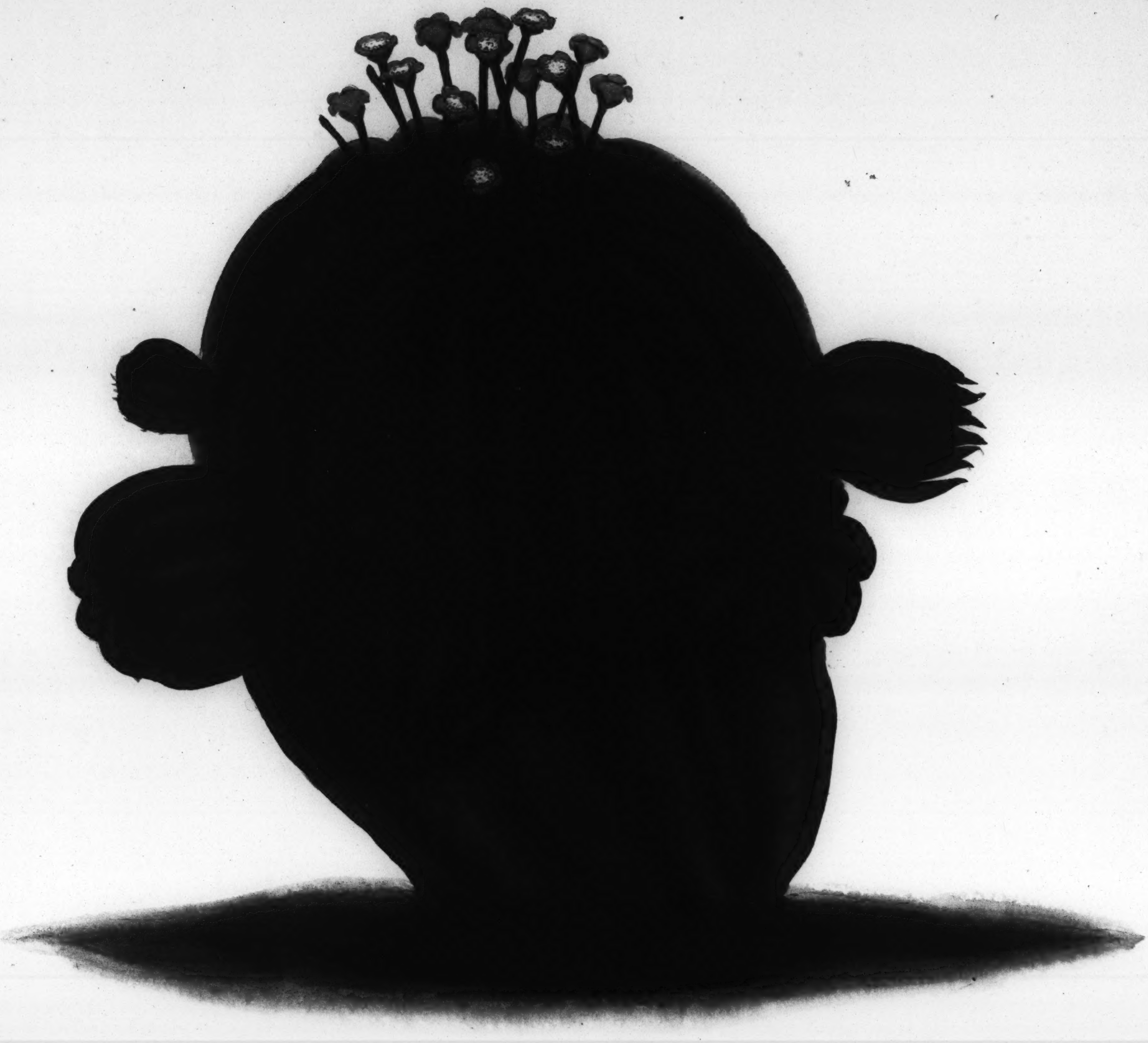
Euphorbia subglobosa multangularis.	Euphorbia nearly round with many angles.

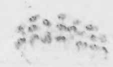
REFERENCE TO THE PLATE.

1. A flower spread open.
2. A chive magnified.

Those who are unacquainted with the versatility of this extraordinary Genus will be a little surprised at seeing a plant with so little resemblance to that on our last plate under the same generic appellation. Even the variations of Protea itself appear trifling, when compared with those of Euphorbia, which includes species with leaves opposite, alternate, scattered, whorled, and imbricated, and others leafless, like the present; plants round, oval, square, triangular and oblong; annual, herbaceous, succulent, thorny, woody, and even arboreous; and natives of all climates, from Siberia to Dusky Bay. Almost all the species agree in being replete with a milky juice which flows from them freely when wounded, and is generally of an acrid corrosive quality. An excellent description of the Euphorbia meloformis was given in the second volume of the Hortus Kewensis, and has been since copied into the Species Plantarum. An engraving and description of it by Mons. Desfontaines, one of the professors in the Museum of Natural History at Paris, also ornaments the first volume of their Annales. The species is dioicous; and, except in the Royal Gardens at Kew, male flowers only have as yet been produced by the plants cultivated in this country, and their progeny at Paris. The stamens come to maturity at different times, those of the centre being the earliest, the woolly filaments of which persisting after the antheræ are fallen off give to the flowers a singular appearance. The species is a native of Africa towards the Cape of Good Hope, and was introduced by Mr. Masson in 1774, but is still very scarce, and requires to be kept in the dry stove or on a shelf in the hot-house, much moisture being always inimical to it. The propagation is by separating the young bulbs from their parent stock, and planting them in pots of earth nearly dry, as they retain their vegetative powers for months without either earth or water.

Pl. 617

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uphorbia, meloformis

PLATE DCXVIII.

ANNESLEA SPINOSA.

Armed Indian Water Lily.

CLASS XIII. ORDER VII.

POLYANDRIA POLYGYNIA. Many Stamens with many Styles or Stigmas.

GENERIC CHARACTER.

Calyx superus, persistens, 4-phyllus. Petala 30—40, oblongo-lanceolata, persistentia. Stamina 60—70, incurva; antheræ subovatæ. Styli nulli. Stigmata: sulculi decem in apice cyathiformi germinis, ad umbonem centralem decurrentes; inconspicui. Germen 10-loculare, supra cyathiforme atque ex columellâ centrali protrusâ umbonatum, margine 10-dentatum. Septa duplicia. Semina loculis in singulis 2, dissepimentis prope parietem alterne affixa, obovata. Fructus: bacca subovata, calyce persistente coronata, spinosissima, 10—20-sperma. Semina matura non vidi.

Anneslea spinosa. *Roxburgh.*

Calyx above, persistent, 4-leaved. Petals 30 to 40, oblong-lanced, persistent. Stamens 60 to 70, incurved; anthers nearly ovate. Styles none. Stigmas: ten inconspicuous channels in the cup-shaped top of the germen, running down towards the central knob. Germen 10-celled, cup-shaped above, with the central column rising like a knob in the middle; the margin 10-toothed. Partitions double. Seeds two in each cell, affixed to the partitions near the outer angle one on each side, inversely ovate. Fruit: a berry nearly ovate, crowned with the persistent calyx, exceeding thorny, 10- to 20-seeded. We have not seen the ripe seeds.

REFERENCE TO THE PLATE.

1. A flower cut open.

Seeds of this wonderful water plant, originally a native of China, were sent preserved in sugar from Calcutta by Dr. Roxburgh, in 1809, to the Most Honourable the Marquis of Blandford, in whose magnificent Aquarium at White Knights it now raises its numerous heads bristling with spines, unrolls its immense leaves, and flourishes in all its grandeur.

In vain we review the plants of its natural order for any analogy to its thorny exterior; the Nymphs and Naiads, *Nymphææ* and *Naiades*, are not more conspicuous for their elegance and beauty than for their mildness; Anneslea like the panther, seems to unite the extremes of ferocity and beauty. The leaves are nearly orbicular, but sometimes a little extended upon one side with a corresponding notch on the side opposite, the largest being from six to eight feet in circumference; green on their upper surface, and reticulated with purplish branching veins, with a sharp curved thorn at each of their principal ramifications; their under side purple, thinly scattered over with a very fine brown pubescence, and reticulated with high raised, cellular, transparent, brown, branched veins, bearing innoxious thorns of the same form as those of the upper surface at their principal divisions. The compartments between the veins are irregular hexagons, pentagons, and rhomboids, which are again intersected by other minute veins nearly in the same manner. The leaf-stalks are centrally affixed, nearly round, very porous, and bristled with soft spines almost to where they rise from the root. The spines are hollow, of the most simple structure, and appear to be formed by a continuance of the cellular tissue of the plant protruded. See Mirbel's Anatomie Vegetale, fig. 24. It is only where they stand out of water, as upon the fruit and upper surface of the leaves, that they become indurated and really formidable. Very different is the nature and structure of the thorns in the genus Rosa, where they are proper secreting vessels or abortions of such, indurated; and may be gradually traced in the R. damascena, muscosa, ferox, rubiginosa, and many others, from the almost imperceptible hair supporting viscous matter, down to the horny lacerating thorn. In the Geranium echinatum, on the contrary, and some Monsoniæ, the spines are mere indurated persistent stipules, and in the Astragali indurated petioles; while in Prunus, Cratægus, Ononis and Genista, the ends of the branches indurate into thorns, and a plant of Ononis spinosa deprived of its verdure and dried, would appear to be only one branched thorn. Thorns are also formed from indurated bracts, abortions of roots, leaves, branches, peduncles, flowers, petioles and supernumerary stipules as in the terrible Gleditschia, horrid with huge bunches of three-forked thorns from the very trunk of the tree. All these and other similar parts of plants, their real nature and use often overlooked, are in their aged and indurated state thrown together by Linnæus under the denomination of "Arma, (or Armour,) to prevent animals from injuring the plants." Camels, however, and asses and goats, are observed to be particularly fond of thorny plants; and even quicks only escape being browsed by the cattle, by becoming woody or growing out of their reach.

The story of the Anneslea's flowering under water may have probably arisen from the very short time the blossoms remain above; as, like those of the Nymphæa, they only rise to expand, and again gradually sink to ripen their seeds after the globules of fertilizing pollen have burst from their parent cells, phœnix like, to perish in renovating their race; and by adding circle to circle served to prolong the immoveable and immeasurable chain. That it certainly flowers above water, we can assert from our own observation; but we were informed at White Knights (where our drawing was taken last September) that it had flowered there below; which might have been owing to its artificial treatment, (We have seen the Nymphæa rubra flowering at the very bottom of the water in the same Aquarium.) and cannot be its natural state, unless we can bring ourselves to believe that nature has endowed it with the power of propagating itself in both elements.

We hope yet to see its magnificent foliage mantling our ponds. Have we not already taught the Thea—the Camillia—the Ta kio—the Moutan—the Yu lan, to resist our winters! Our water is not less temperate than our sky. The name Anneslea was given by Dr. Roxburgh, in honour of the Right Hon. George Annesley, Viscount of Valentia, who discovered the plant growing in the Gagra River in Oude, and also about Chittagong, when on his travels in India. The fruit abundantly distinguishes the genus from the Euryale of Mr. Salisbury.

PLATE DCXIX.

EUGENIA Zeylanica.

Ceylon Eugenia.

CLASS XII. ORDER I.

ICOSANDRIA MONOGYNIA. Stamens from the Cup. One Style.

GENERIC CHARACTER.

Calyx quadripartitus, superus. Petala quatuor. Bacca 1-locularis, 1-sperma.	Cup four-parted, above. Petals four. Berry of one cell, one-seeded.

SPECIFIC CHARACTER.

Eugenia foliis subovalibus integerrimis coriaceis retusis, pedunculis unifloris solitariis vel geminatis, axillaribus lateralibusque.	Eugenia with oval entire leathery retuse leaves, and one-flowered peduncles, either solitary or in pairs, axillary or lateral.

Eugenia zeylanica. *Willd. Sp. Pl. vol. 2. p. 963.*

REFERENCE TO THE PLATE.

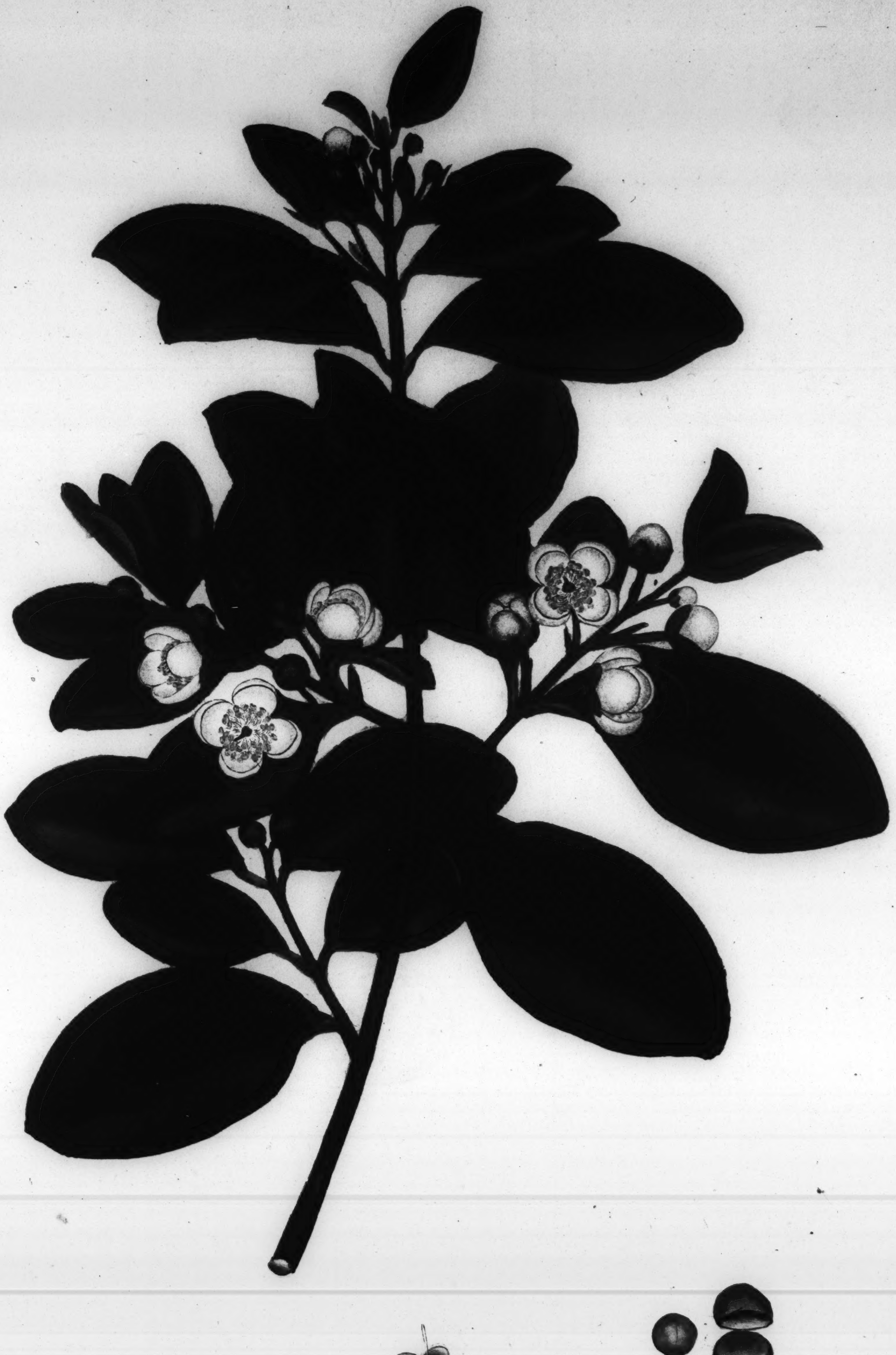
1. Empalement, seed-bud and pointal.
2. The fruit, with the seed detached.

The Ceylon Eugenia is a low bushy wide-spreading shrub, with both the leaves and branches extending nearly horizontally. The flowers grow from the axils of the leaves and sides of the branches upon simple downy footstalks, which have two small bracts a little above their middle; and open in succession from the lower axils upwards. Professor Willdenow is not quite correct in stating the leaves to be impunctate, a minute dotting being visible on both surfaces with the naked eye, and very distinctly with the aid of a common eye-glass. The fruit is of the size of a large pea, rough with minute warts, and crowned with the persistent calyx.

We have seldom seen a more striking example of the astonishing resources provided by nature for the continuation of species than this plant, whose little germen when blossoming contains sixteen infant seeds (clustering round a common centre), while the fruit admits of one only coming to maturity! Above eighty stamens are also provided for the fertilization of a solitary stigma. We have often admired the common chesnut, each germen of which when blossoming contains twelve seeds in embryo, but this yet surpasses it.

We were favoured with fresh specimens last July by A. B. Lambert, esq. from his seat at Boyton, and a foreign specimen in his collection has also enabled us to add the fruit, which has not yet ripened in this country. The plant is stated in Donn's Catalogue to have been introduced in 1798, most probably by Sir Abraham Hume, as the only plants of it that we have seen came originally from his collection.

Pl 619



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Eugenia Zeylanica

PLATE DCXX.

SCHINUS DENTATA.

Toothed Schinus.

CLASS XXII. ORDER IX.

DIOECIA s. POLYGAMIA DECANDRIA. Shafts and Chives separate on different Plants, or both on the same. Ten Chives.

GENERIC CHARACTER.

Mas. Calyx 5-fidus. Petala 5. Stamina 8—10 sub nectario rotato inserta.	**Male.** Cup 5-cleft. Petals 5. Chives 8—10 affixed under a wheel-shaped nectary.
Fem. Calyx et petala maris. Stigmata 3. Drupa sicca, multi-locularis, submonosperma. Nux subturbinatus, obtuse angulatus. Embryo subreniformis, compressus. Cotyledones 2, æquales, latofalcatæ. Radicula supera, cylindrica, incurva.	**Female.** Cup and blossom as in the male. Summits 3. Berry dry, with many cells and generally one seed. Nut nearly top-shaped with blunt angles. Embryo nearly kidney-shaped, compressed. Seed-leaves 2, equal, broadly falcate. Radicle above, cylindrical, incurved.

SPECIFIC CHARACTER.

Schinus foliis simplicibus dentatis.	**Schinus** with simple toothed leaves.

REFERENCE TO THE PLATE.

1. The empalement.
2. A petal magnified.
3. A chive magnified.
4. The nectary magnified.
5. A ripe berry.
6. The nut cleared from the pulp.

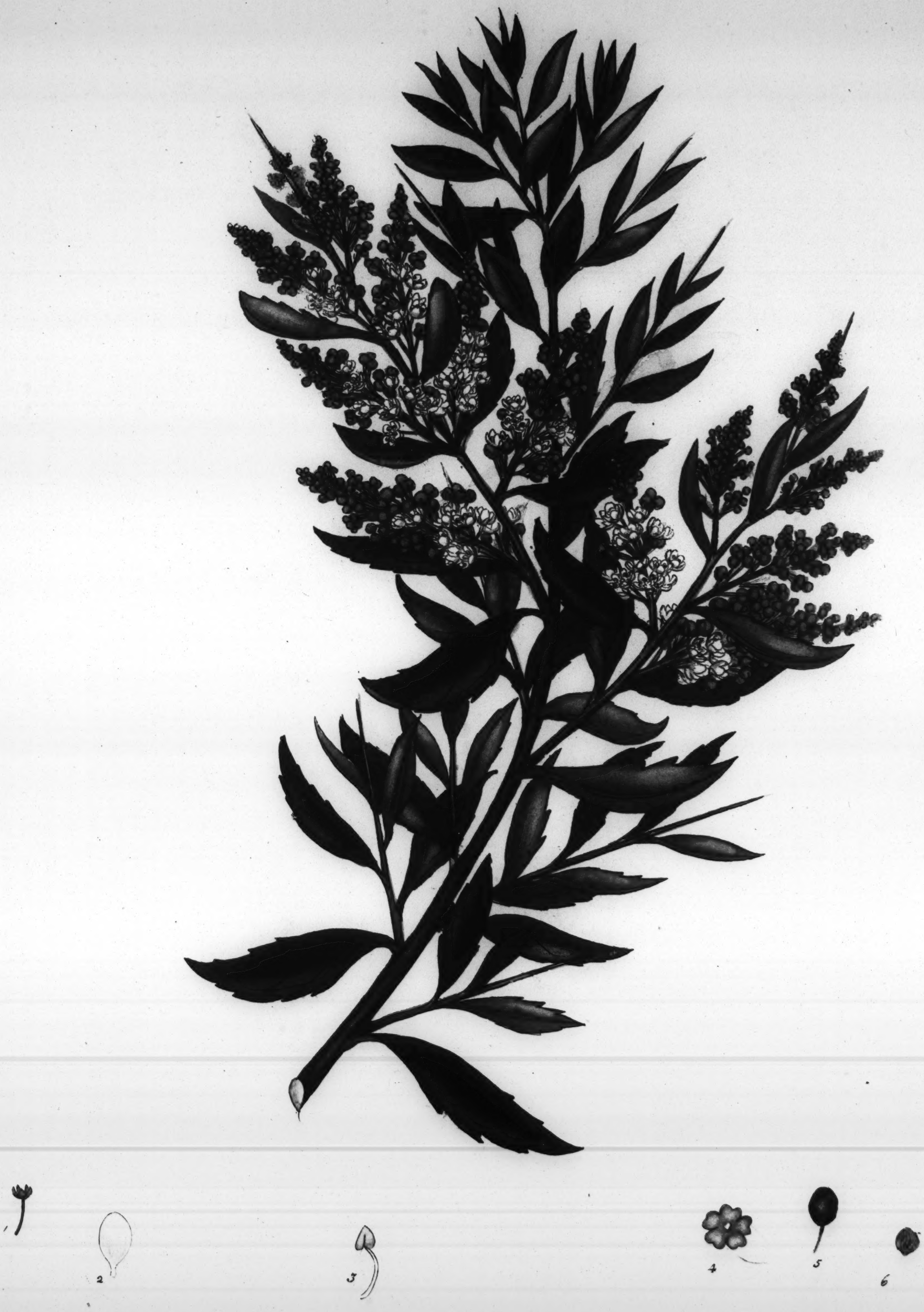
Specimens of this curious Schinus were communicated in May by the Right Honourable the Marquis of Blandford, from his gardens at White Knights. Its native country, as we are informed, is Owhyhee, an island long to be remembered in English history for the loss of the illustrious Cook;

> Who, born to bless mankind, fair Science bore
> To Ocean's bounds and isles unknown before;
> And, while to guard barbarian lives his care,
> Was murder'd by the men he sought to spare.

At what time the Schinus dentata was brought to England, or by whom, we have not been able to learn. It thrives very well in sheltered situations here in the open ground, and even ripens fruit in good seasons when trained against a wall. The berries are black, nearly of the size of small currants, with a sweet fleshy pulp, each berry containing a single nut which is bluntly angled, and a flattened two-leaved crooked embryo enclosed in a farinaceous perisperm of unequal thickness, having outwardly the same form as the nut.

Another species agreeing exactly in habit with the present, the toothed leaves excepted, S. dependens, (the Amyris polygama of Cavanilles and Willdenow,) has before been added to the genus by Ortega: and we cannot help noticing how remarkable it is that three plants, two of which differ so widely in habit, should yet agree so closely in their fructification. The insertion of the stamens, nectary, germen, stigmas and fruit is exactly similar; and the fruit of Schinus Molle figured by Gærtner (as far as his figure and description go) coincides exactly with the fruit of S. dentata. For the ripe fruit and some observations on the genus we are indebted to A. B. Lambert, esq.

Pl. 620



Schinus. dentatus

PLATE DCXXI.

JUSSIEUA exaltata.

Tall Jussieua.

CLASS VIII or X. ORDER I.

OCTANDRIA seu DECANDRIA MONOGYNIA. Eight or Ten Stamens. One Style.

GENERIC CHARACTER.

Calyx 4- seu 5-partitus, superus. Petala 4 seu 5. Capsula 4- seu 5-locularis, angulis dehiscens. Semina numerosa.	**Cup** 4- or 5-parted, above. Petals four or five. Capsule 4- or 5-celled, splitting at the corners. Seeds numerous.

SPECIFIC CHARACTER.

Jussieua erecta, pubescens, foliis oblongo-lanceolatis pubescentibus punctato-scabris; floribus 4-petalis 8-andris, stigmate 4-lobo.	**Erect** pubescent Jussieua with oblong-lanced pubescent leaves rough with little dots; flowers with 4 petals and 8 stamens, and the stigma four-lobed.

REFERENCE TO THE PLATE.

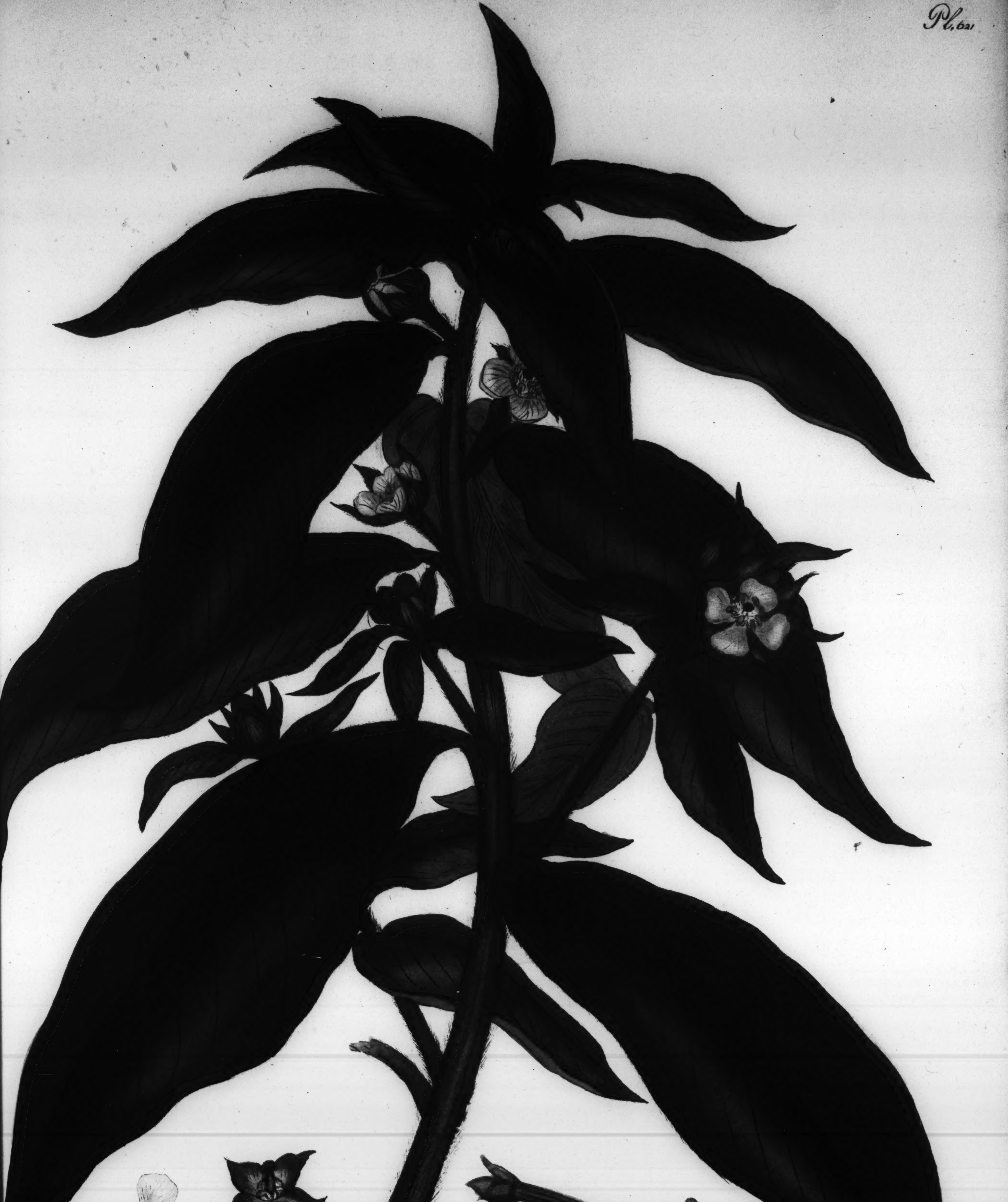
1. A petal.
2. Empalement, seed-bud, and pointal.
3. The capsule.
4. A ripe seed.
5. The same magnified.

Linnæus could scarcely have selected a happier genus in honour of the great French botanist; by whose arrangement plants agreeing in general habit and character are not liable to be thrown to various classes for a slight difference in their number of stamens, as in the Linnæan; where octandrous and decandrous plants can only be brought together by special license.

Of the twelve species of Jussieua enumerated by Willdenow, and the two additional species since described by Humboldt and Bonpland, our plant, communicated from Boyton in September, most resembles the *octovalvis*, of which the Professors Swartz and Jacquin appear to have described very different varieties. Ours, however, appears to be specifically distinct from either.

Mr. Lambert informs us that the plant is a native of the East Indies, from whence the seeds were sent to him by Dr. Roxburgh, with a reference to the *Cattu Carambu* of the Hortus Malabaricus, (tom. ii. p. 97, fig. 50,) which is a very fair representation of it.

The name *exaltata*, bestowed upon it by Dr. Roxburgh, may have been suggested by comparing it with the two other Indian species, the *repens* and *suffruticosa*; but the *peruviana* must be a much taller plant, from the account given of it by Father Feuillée.



Juſsieua, exaltata

PLATE DCXXII.

LEPTOSPERMUM scoparium.

New Zealand Tea.

CLASS XII. ORDER I.

ICOSANDRIA MONOGYNIA. Stamens from the Calyx. One Style.

GENERIC CHARACTER.

CALYX 5-fidus, semisuperus. Petala quinque, unguiculata, staminibus longiora. Stigma capitatum. Capsula 4- seu 5-locularis, polysperma. Semina angulosa.

CUP 5-cleft, free above the middle. Petals five, clawed, and longer than the stamens. Stigma headed. Capsula 4- or 5-celled, many-seeded. Seeds angular.

SPECIFIC CHARACTER.

LEPTOSPERMUM foliis ovatis ovato-lanceolatisque mucronatis obsolete trinerviis; calycibus glabris, dentibus membranaceis coloratis.

LEPTOSPERMUM with ovate and ovate-lanced dagger-pointed faintly 3-nerved leaves, and smooth calyces with membranaceous coloured teeth.

L. scoparium. *Willd. sp. pl.* 2. *p.* 948.
Tea Plant. *Cook's Second Voyage, vol.* 1. *p.* 100. *tab.* 32.

REFERENCE TO THE PLATE.

1. Empalement, chives, and pointal.
2. The same cut open, one tip magnified.
3. Seed-bud and pointal, summit magnified.
4. A petal.

THE Leptospermum scoparium grows naturally in New Zealand, where it was found in Cook's first voyage of discovery in the year 1769, and was first published with an engraving of the fructification in 1776, by the two Forsters, in their *Characteres Generum Plantarum*, or Account of the Plants they collected in that expedition. The following description of the plant, and accounts of the benefits his people derived from it, are extracted from Captain Cook's Account of his Second Voyage, vol. i. p. 99 to 101.

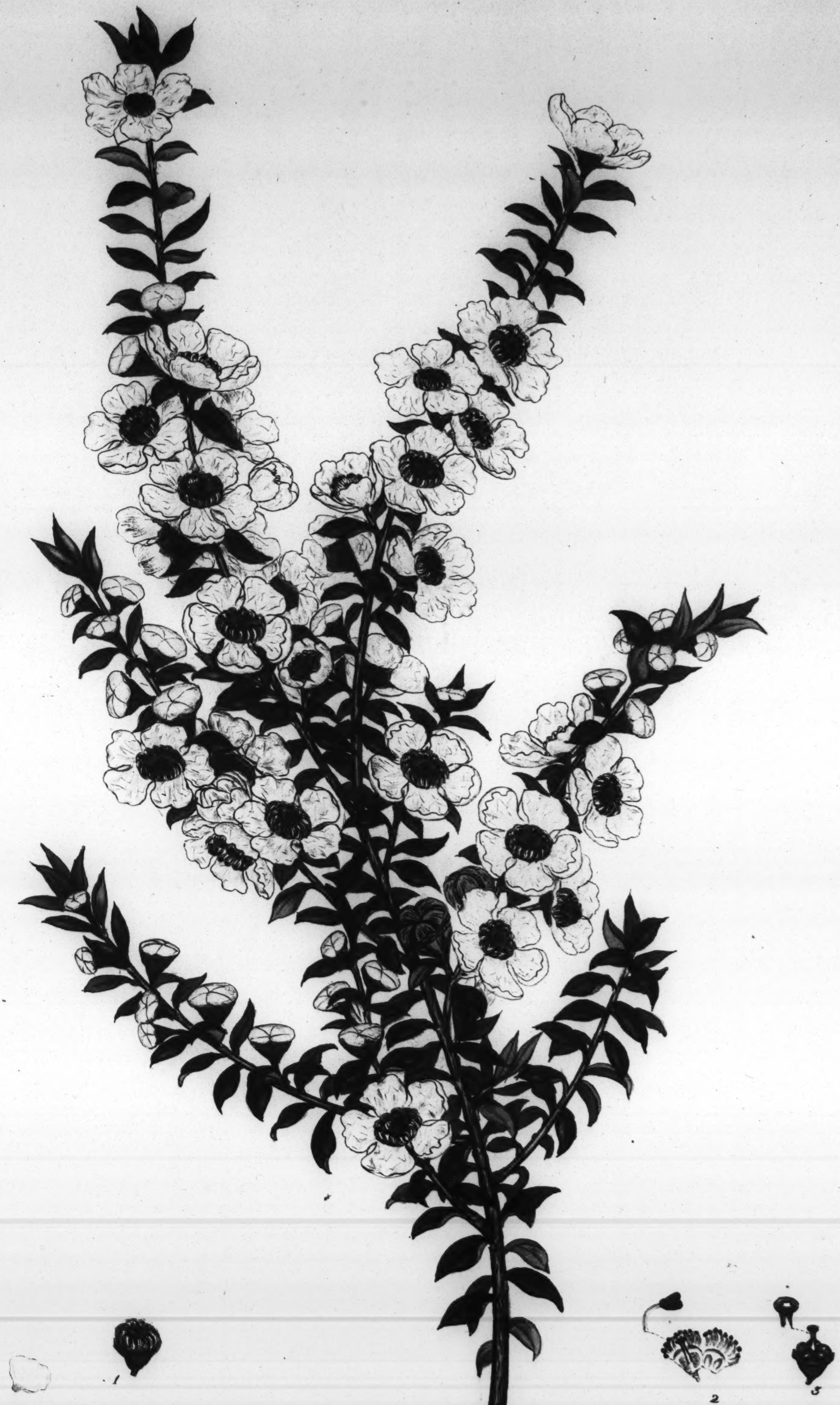
"The Tea plant is a small tree or shrub, with five white petals or flower-leaves, shaped like those of a rose, having smaller ones of the same figure in the intermediate spaces, and twenty or more filaments or threads. The tree sometimes grows to a moderate height, and is generally bare on the lower part, with a number of small branches growing close together towards the top. The leaves are small and pointed like those of the myrtle; it bears a dry roundish seed-case, and grows commonly in dry places near the shores. The leaves, as I have already observed, were used by many of us as tea, which has a very agreeable bitter and flavour when they are recent, but loses some of both when they are dried. When the infusion was made strong, it proved emetic to some, in the same manner as green tea.

"The beer certainly contributed not a little to the healthiness of our people. As I have already observed, we at first made it of a decoction of the spruce leaves (Dacrydium cupressinum); but finding that this alone made the beer too astringent, we afterwards mixed it with an equal quantity of the Tea plant, (a name it obtained in my former voyage from our using it as tea then, as we also did now,) which partly destroyed the astringency of the other, and made the beer exceedingly palatable, and esteemed by every one on board."

In the younger Forster's account of the same expedition, vol. i. p. 128 and 129, a similar account of its utility and beauty is given, with the additional information, that, in a fine soil, in thick forests, it was found from 30 to 40 feet high, and above a foot in diameter; while on a hilly arid situation he found it bearing flowers and seed when only 6 inches high.

The plant was introduced to the Royal Gardens at Kew so early as 1772, and several varieties of it are now in cultivation. It is increased both by seeds and cuttings, and requires to be kept in the Greenhouse or Conservatory.

Specimens were communicated by Mr. Donn from the botanic garden at Cambridge last May, and others in June by Mr. Milne from Fonthill.



Leptospermum, scoparium

PLATE DCXXIII.

ARDISIA ELEGANS.

Elegant Ardisia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Stamens. One Style.

GENERIC CHARACTER.

Calyx 5-phyllus. Corolla hypocrateriformis. Antheræ magnæ, erectæ. Stigma simplex. Drupa sicca, supera, 1-sperma.	**Cup** five-leaved. Blossom salver-shaped. Anthers large, erect. Stigma simple. Berry dry, above, one-seeded.

SPECIFIC CHARACTER.

Ardisia corymbis terminalibus, compositis, nutantibus; foliis lato-lanceolatis, crenatis, nitidis, margine reflexis.	**Ardisia** with terminal, compound, nodding corymbs, and broad-lanced, crenated, shining leaves, with the margin reflected.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. The seed-bud and pointal.

This beautiful species grows naturally in moist situations and by the sides of rivulets in Pulo-Pinang, where it was discovered by the collector sent out by T. Evans, Esq., and brought to England with him on his return in 1809; and our drawing was taken from a plant of it nearly five feet high, which has been flowering beautifully this year in the collection at Stepney, from August to the end of November. The common height of the plant in Pinang, as the collector informs us, is from eight to about twelve feet.

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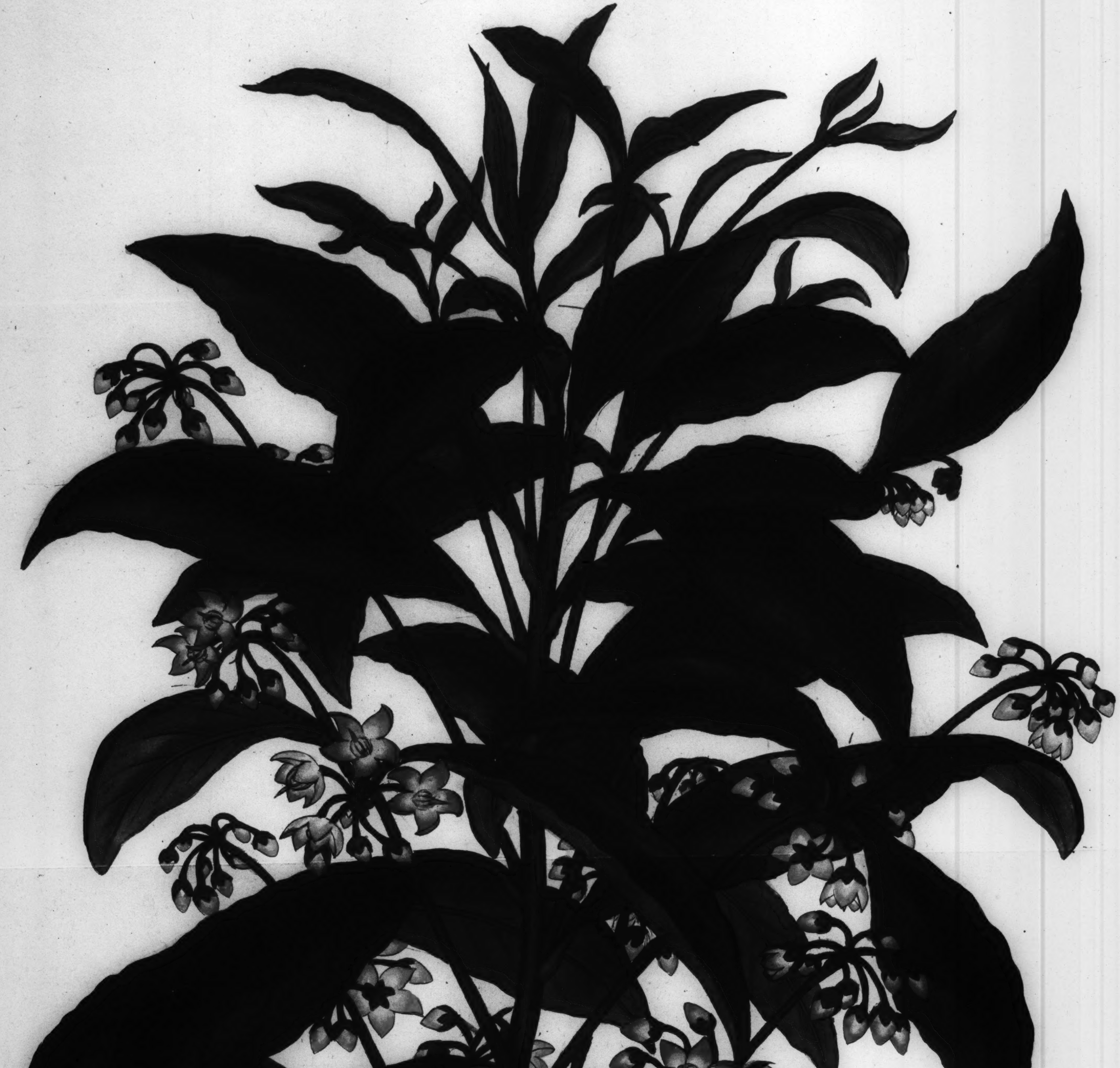


PLATE DCXXIV

LOTUS australis.

Southern Lotus, or Bird's-foot Trefoil.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Stamens in Two Sets, Ten.

GENERIC CHARACTER.

Legumen cylindricum, strictum. Filamenta sub-cuneiformia. Alæ sursum longitudinaliter conniventes.	**Pod** cylindrical, straight. Filaments somewhat wedge-shaped. Wings united lengthways above.

SPECIFIC CHARACTER.

Lotus herbaceus, foliis stipulisque lanceolatis obovato-lanceolatisque pubescentibus; floribus amplis paucis; capitulis longè pedunculatis: leguminibus tereti-linearibus calyce duplò longioribus.	**Herbaceous** Lotus, with lanceolate and inversely ovate downy leaves and stipules; large flowers few together, in heads upon long footstalks; the pods roundish linear, and double the length of the calyx.

REFERENCE TO THE PLATE.

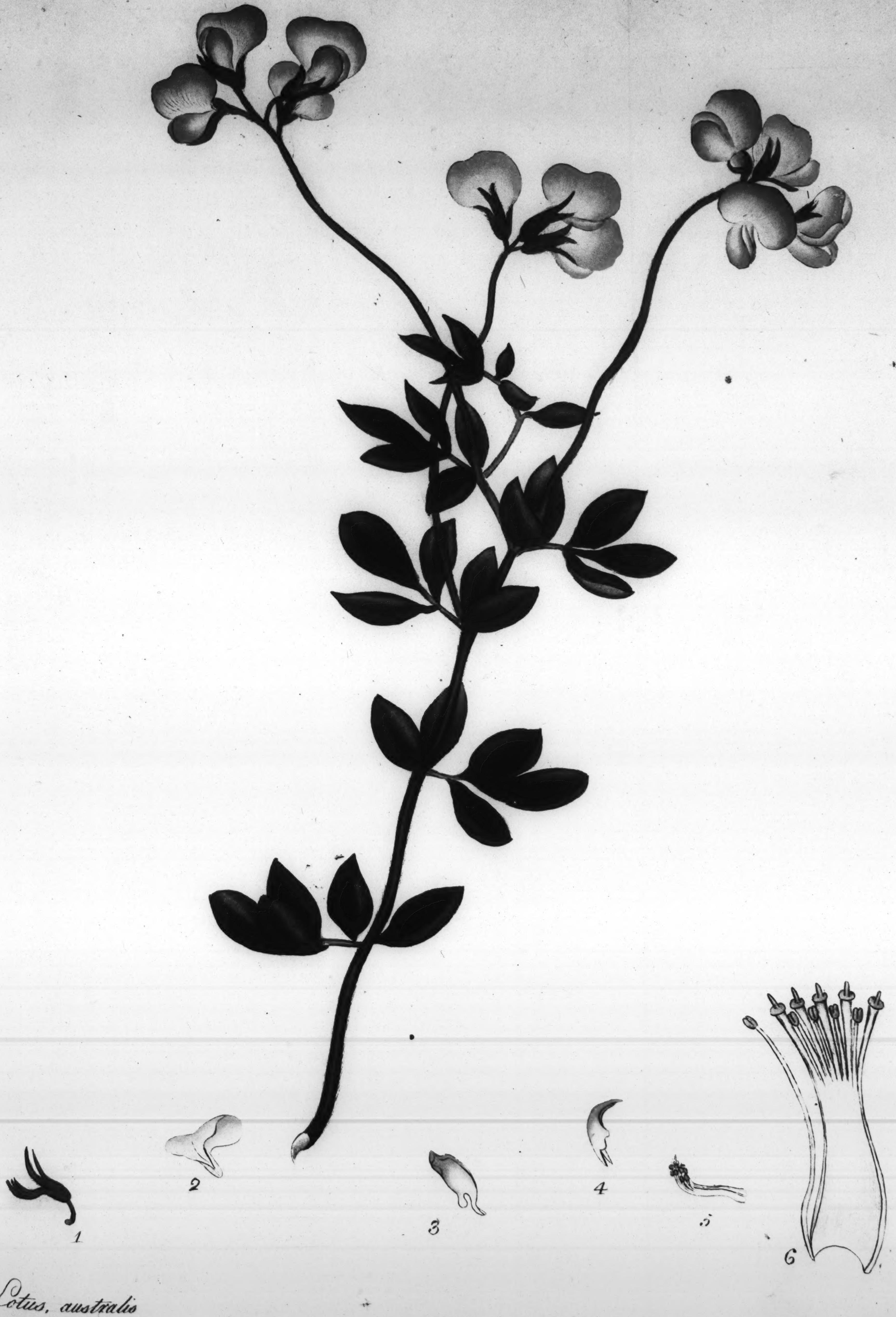
1. The empalement.
2. The vexillum.
3. One of the wings.
4. The keel.
5. Chives and pointal.
6. The chives spread open and magnified.

New Holland, so rich in new families of plants, sometimes (though rarely) also furnishes us with a few species belonging to genera common to our northern regions, as in Convolvulus, Chenopodium, Campanula, and our present subject, of which the specimen was communicated from Fonthill last July by Mr. Milne. By whom the species was introduced we have not been able to learn; but we have seen dried specimens of it, brought over by the late Governor King, in the herbarium of A. B. Lambert, Esq.

The plant is of humble growth, and rather conspicuous when in blossom from its fine heads of flowers, but has not yet produced seeds in this country; and our account of the fruit is from the foreign specimens above mentioned. Like most other New Holland plants, Lotus australis requires to be kept in the Greenhouse, or at least sheltered in winter.

In our account of Euphorbia meloformis we omitted to add that the figure was taken from a fine plant in the collection of J. Vere, Esq. Kensington Gore, in August last.

Pl 624



Lotus, australis

PLATE DCXXV.

BARLERIA CRISTATA.

Crested Barleria.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Four Stamens in unequal Pairs. Seeds covered.

GENERIC CHARACTER.

Calyx 4-partitus, inæqualis. Stamina 2, longè minora. Capsula 4-angularis, bilocularis, bivalvis.	Cup 4-parted, unequal. Stamens 2, much smaller. Capsule 4-angled, 2-celled, 2-valved.

SPECIFIC CHARACTER.

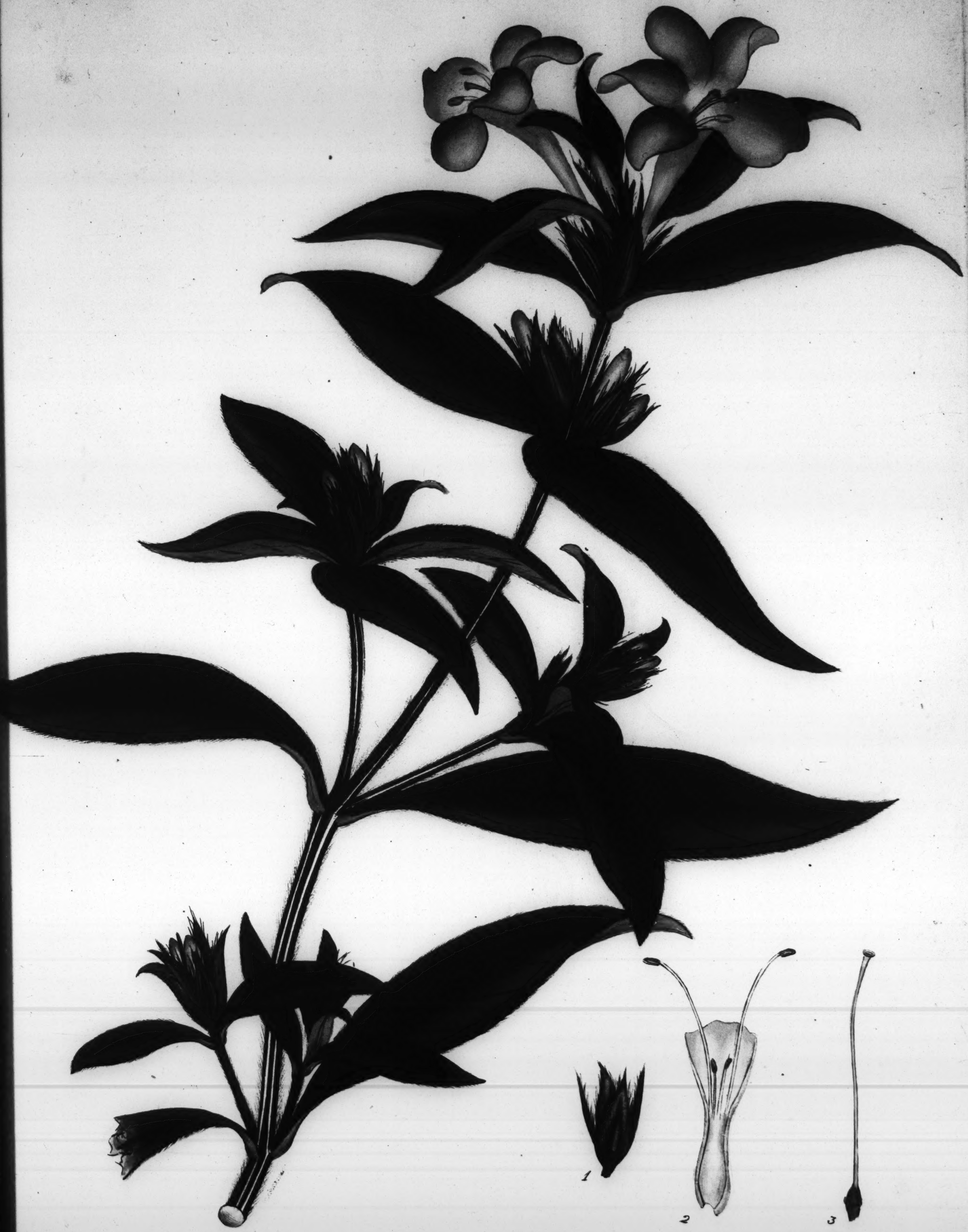
Barleria foliis oblongis integerrimis; calycis foliolis duobus latioribus ciliatis, duobusque linearibus acutis.	Barleria with oblong entire leaves; two of the calyx-leaves broader and ciliated, and two linear acute.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open, segments of the border cut off.
3. Seed-bud and pointal.

Linnæus's excellent description of this species in the first edition of the Species Plantarum is rather at variance with his character of the genus; nor can the plant certainly be a congener of either of the two original species of Plumier, one of which indeed the late Professor Vahl found it necessary to remove to Ruellia. To the curious little sheath within the corolla, which encloses the germen about two-thirds of its length, in Barleria cristata, and one side of which is shorter than the other, we do not recollect having ever before met with any thing analogous.

We are indebted for fine specimens in blossom to T. Evans, esq., in whose collection it has continued flowering during the autumn, and by whom it was introduced to this country in 1808. The plant seems to grow freely, and is propagated by cuttings. It requires to be kept in the hot-house.



Barleria cristata

PLATE DCXXVI.

GEODORUM CITRINUM.

Lemon-coloured Geodorum.

CLASS XX. ORDER I.

GYNANDRIA MONANDRIA. Style bearing the Stamens. Stamen One.

ESSENTIAL GENERIC CHARACTER.

Petala quinque, longitudine subæqualia, patentia. Labellum cymbiforme; carinâ posticè paulò productâ. Anthera terminalis, opercularis, decidua. Massæ pollinis duæ, reniformes, cereaceæ.

Petals five, about an equal length, spreading. Lip boat-shaped, with the keel a little prolonged behind. Anther terminal, cover-like, deciduous. Masses of pollen two, kidney-shaped, waxy.

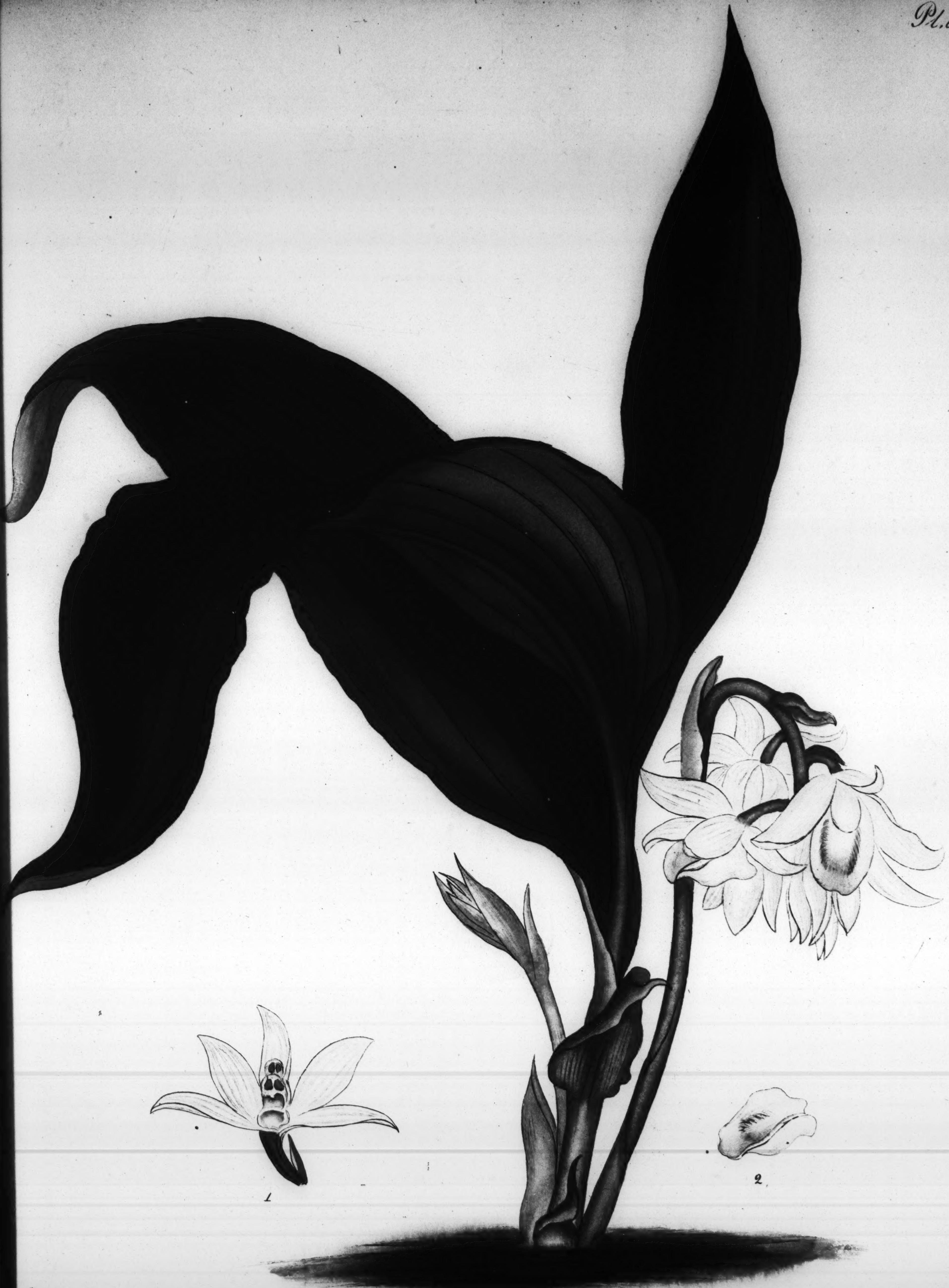
REFERENCE TO THE PLATE.

1. A blossom spread open, divested of the lip.
2. The lip detached.

Little more than sixty years ago, Mr. Miller, the best informed gardener of his time, and emphatically styled by foreigners, to whom he was known by his writings, 'Hortulanorum Princeps;' after forty years experience in gardening, in the last edition of his Dictionary which he published, when treating of Epidendrums, says: "It would be to little purpose to enumerate them here, as the plants cannot by any art yet known be cultivated in the ground; though, could the plants be brought to thrive by culture, many of them produce very fine flowers of uncommon forms."—Genius and perseverance, however, have completely vanquished this prejudice, and we now cultivate more species of Epidendrum in England, or what in Mr. Miller's time would have been considered as such, than he supposed to exist: indeed few plants are at present in greater favour with cultivators than those of the beautiful order of Orchideæ; and our present subject, discovered in Pulo-Pinang, or Prince of Wales's Island, at the same time with the Ardisia elegans, is certainly not one of the least elegant. Both its peculiar habit and character easily prevent its being confounded with any natural genus yet described, although some species have been enumerated amongst the Limodorums by Dr. Roxburgh, and transposed with no more felicity from thence to Malaxis by Professor Willdenow.—The genus, however, is more allied to Cymbidium in character than either of the above; and, as far as our knowledge of the order at present extends, ought to be placed near to that in the arrangement. The other species of the genus before alluded to are the Malaxis nutans and cernua of Willdenow, Limodorum nutans of the Plants of Coromandel, and the L. recurvum of the same; all of which agree in having the same remarkable flaccidity of foliage, and recurved inflorescence.

The drawing was taken at Stepney last October, and the plant was still in blossom in the end of November.

Some idea of the prodigious extent of this family of plants may be inferred from Dr. Buchanan's having gathered more than fifty new species in his late journey through Napaul, and Mr. Brown above a hundred, (all now described in his Prodromus,) during his botanical expedition to New Holland and Van Diemen's Land; and from the statement of the Spanish botanists, Messrs. Ruiz and Pavon, who spent eight years botanizing in South America, that more than a thousand distinct species grow there upon the sides of the Cordilleras!



Geodorum. citrinum

PLATE DCXXVII.

BEGONIA EVANSIANA.

Evans's Begonia.

CLASS XXI. ORDER VII.

MONŒCIA POLYANDRIA. Stamens and Styles separate upon the same Plant. Stamens more than Seven.

GENERIC CHARACTER.

Mas. Calyx 0. Corolla 4-petala, petalis 2 oppositis majoribus. Stamina numerosa.

Fem. Calyx 0. Corolla 6- seu 4-petala, ut mascula. Styli 3, bifidi. Capsula infera, triangularis, alata, 3-locularis, polysperma.

Male. Cup none. Blossom 4-petalled, with two opposite petals larger than the others. Stamens numerous.

Female. Cup none. Blossom 6- or 4-petalled, as the male. Styles 3, bifid. Capsule below, triangular, winged, 3-celled, many-seeded.

SPECIFIC CHARACTER.

Begonia foliis inæqualiter cordatis, suprà hispidulis, nitidis, margine inæqualibus, acutissimè serrulatis: petalis duobus lato-ovatis, duobus obovatis quadruplò majoribus: caulibus flexuoso-erectis, nodosis: axillis bulbiferis.

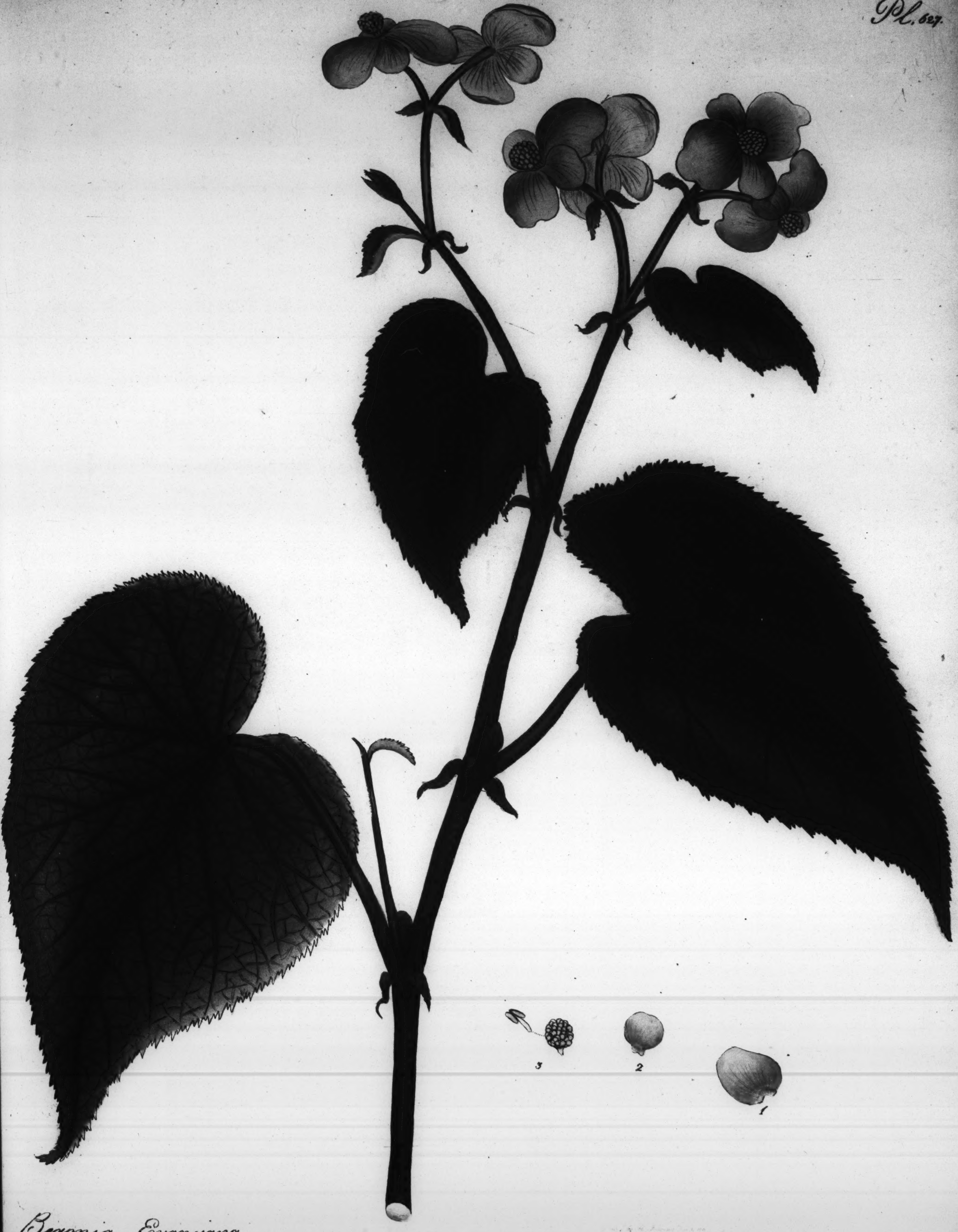
Begonia with unequally heart-shaped leaves a little hispid and shining above, with the margin irregular, most sharply and finely toothed: two of the petals broadly ovate, and four times larger than the two inversely ovate ones: the stem a little zigzag: axils bulbiferous.

REFERENCE TO THE PLATE.

1. One of the large petals.
2. A small petal.
3. The stamens, one of the anthers magnified.

For this very ornamental species we are also indebted to T. Evans, esq., whose collector discovered it growing about the sides and clefts of rocks near a waterfall in the interior of the Island of Pulo-Pinang in 1808. As yet it has only produced male flowers at Stepney; but the bulbs in the axils of the leaves always supply abundant means of propagating it, and its beauty and liveliness of colouring well entitle it to a place in every curious collection.

The drawing was taken at Stepney, last October, from a plant about two feet four inches in height.



Begonia. Evansiana.

PLATE DCXXVIII.

CLERODENDRUM PYRAMIDALE.

Pyramidal Clerodendrum.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

GENERIC CHARACTER.

Calyx 5-fidus, campanulatus. Corollæ limbo 5-partito, æquali. Drupa 4-sperma, nuce uniloculari.	**Cup** 5-cleft, bell-shaped. Limb of the blossom equally 5-parted. Berry 4-seeded, nut one-celled.

SPECIFIC CHARACTER.

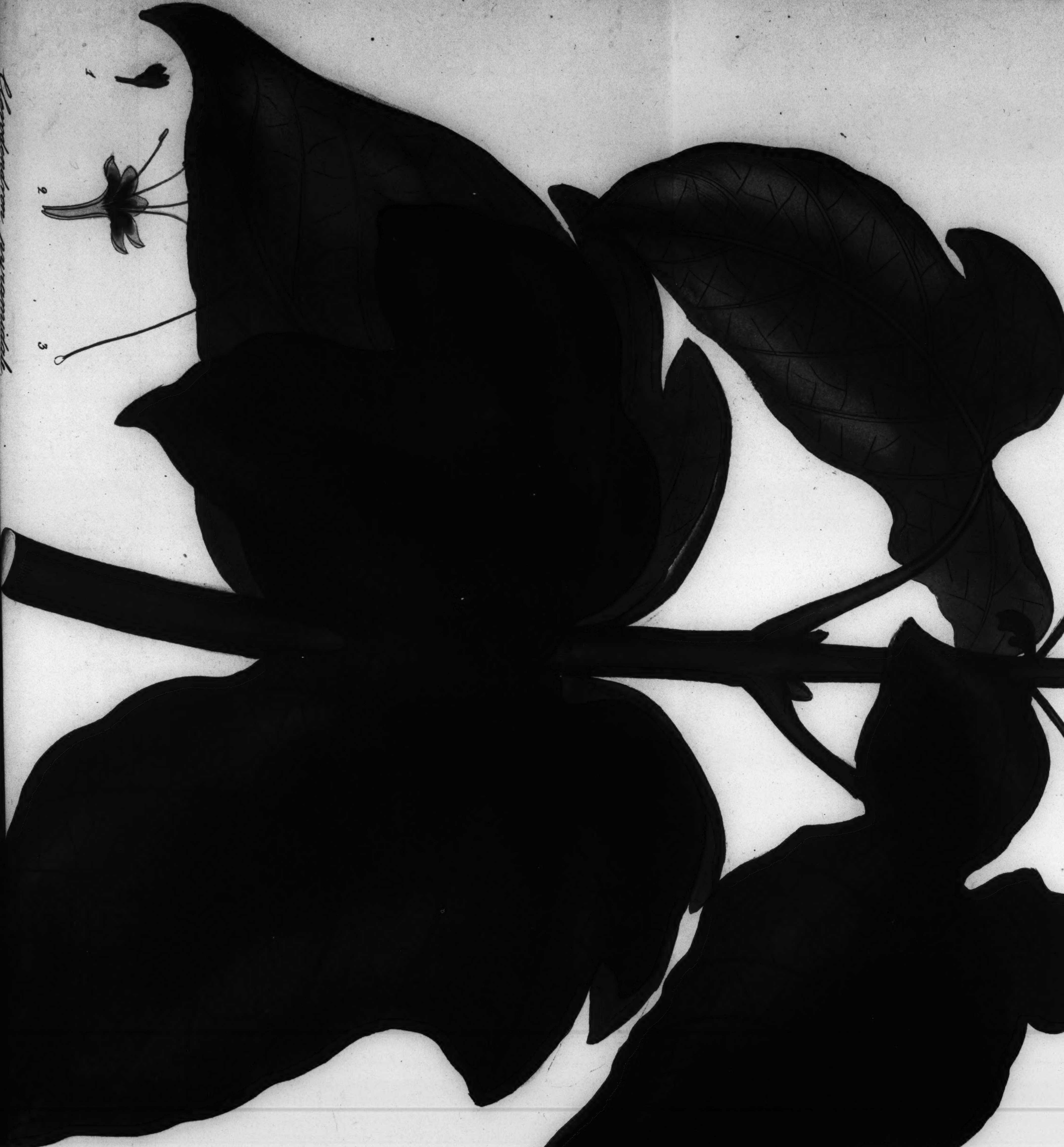
Clerodendrum foliis basi profundè cordatis, quinquelobis, margine undulatis, edentulis: panicula brachiata; pedunculis pubescentibus, trichotomis.	**Clerodendrum** with the leaves deeply heart-shaped at the base and five-lobed, waved on the margin and toothless; the panicle cross-armed; the peduncles pubescent, three-forked.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. Seed-bud and pointal.

This before unnoticed species of Clerodendrum was introduced from the Island of Pinang, where it grows naturally wild, by T. Evans, Esq. of Stepney, in 1809. The leaves are very large, a little hispid on their upper surface: the height of the plants, in the specimens which we have seen, is from three to five feet. The plant appears to grow freely, and may be propagated by cuttings, but requires to be kept in the hot-house. The drawing was taken at Stepney last October.

Clerodendrum pyramidale.



Pl. 628

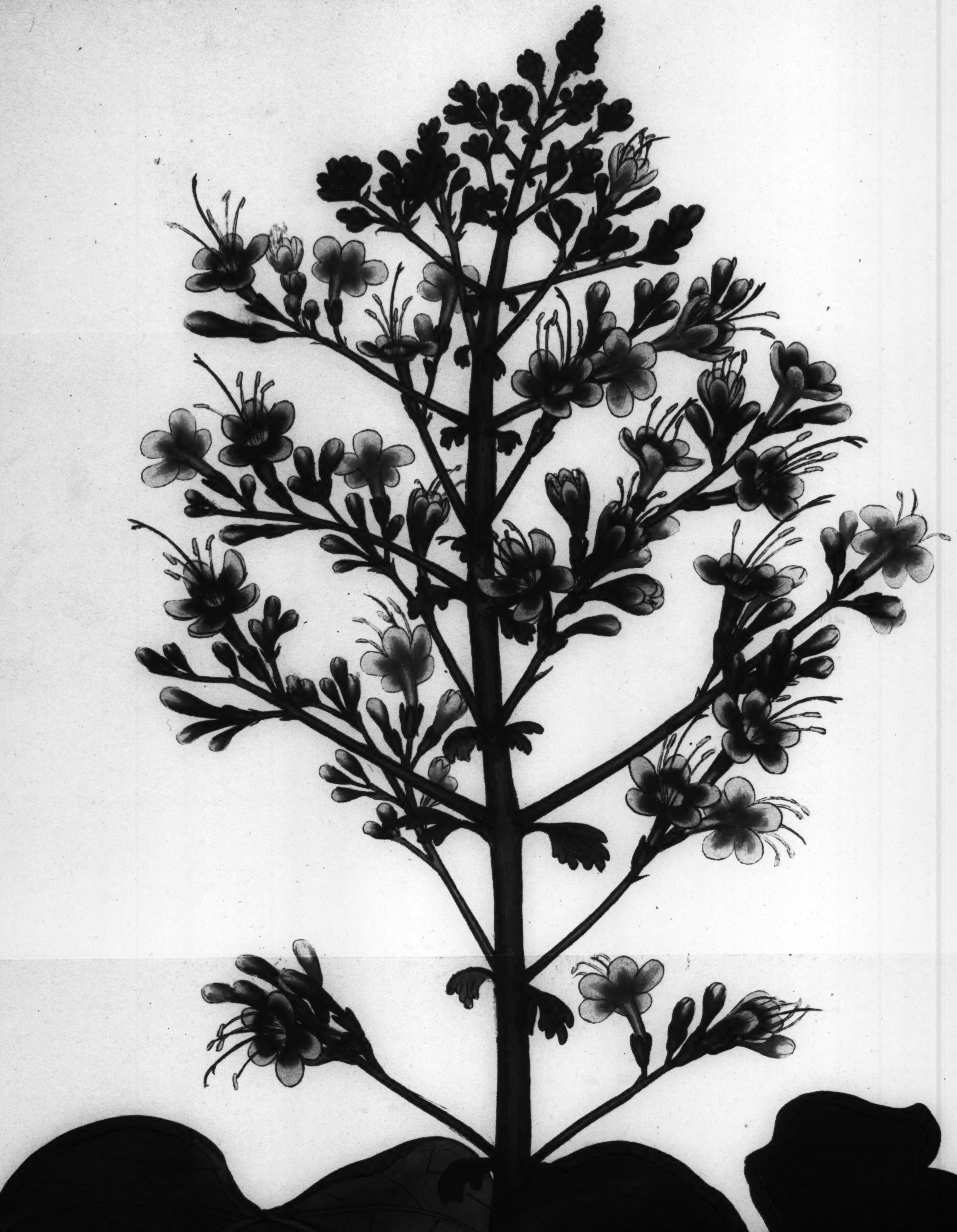


PLATE DCXXIX.

DESMANTHUS NATANS.

Floating Desmanthus, or Aquatic Sensitive.

CLASS XXIII. ORDER I.

POLYGAMIA MONŒCIA. Various Dispositions upon one Plant.

GENERIC CHARACTER.

Hermaph. Calyx 5-dentatus. Corolla 5-petala vel 5-partita. Stamina 10. Pistillum 1. Legumen bivalve.	*Hermaph.* Cup 5-toothed. Blossom 5-petalled or 5-parted. Stamens 10. Style 1. Pod 2-valved.
Neuter. Calyx 5-dentatus. Corolla 5-petala vel 5-partita vel nulla. Stamina 10, sterilia, lanceolato-dilatata.	*Neuter.* Cup 5-toothed. Blossom 5-petalled or 5-parted or none. Stamens 10, sterile, enlarged into a lance-shape.

SPECIFIC CHARACTER.

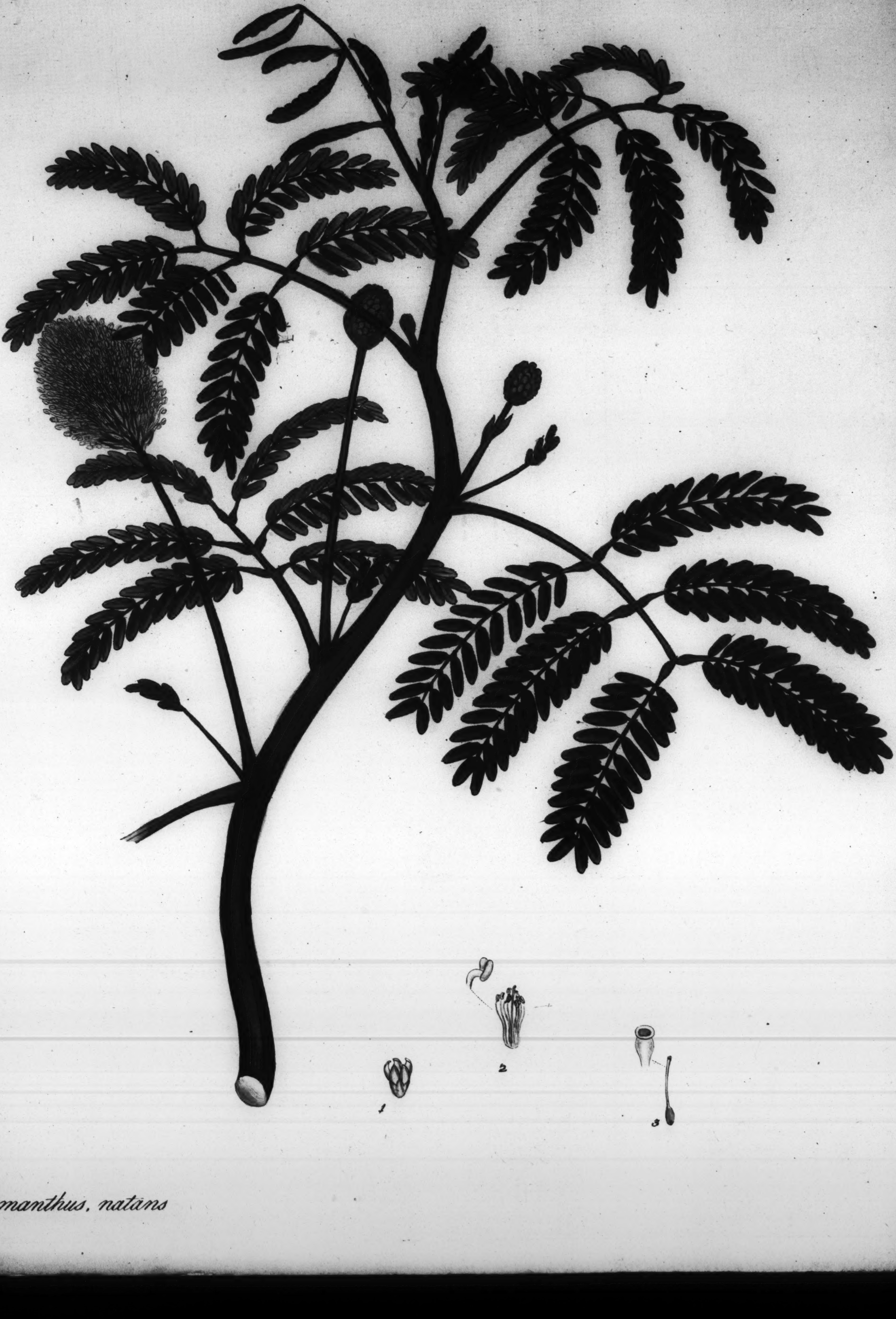
Desmanthus inermis, foliis bipinnatis, partialibus trijugis, propriis tredecimjugis, spicis oblongis, interruptis, pedunculo nudo, caule tereti, radicante. *Willd. Sp. Pl.* 4. *p.* 1044.	Unarmed Desmanthus, with doubly pinnate leaves, the partial wings in 3 pairs, the proper in 13, the spikes oblong, interrupted, the flower-stalk naked, the stem round and rooting.

REFERENCE TO THE PLATE.

1. Empalement and blossom.
2. Stamens and pointal, one anther magnified.
3. Seed-bud and pointal, summit magnified.

This little delicate aquatic, growing naturally in pools and lakes of fresh water in India and Cochinchina, and quivering at every breeze, its roots having no attachment to the soil, and the foliage yielding but little to that of the Mimosa pudica in sensibility, forms a most striking contrast to the Anneslea spinosa of our 128th number. Father Loureiro, who calls it Neptunia oleracea, informs us that in China and Cochinchina, where they cultivate it as a salad herb in pools and slow-flowing streams, they are accustomed to tie the plants to stakes, to prevent their floating to a distance.

A description of the plant, accompanied by an elegant figure, will be found in the 2d volume of Dr. Roxburgh's Plants of the Coast of Coromandel, under the name of Mimosa natans; but from the total dissimilarity between the fruit and that of the genus Mimosa, we have preferred following the arrangement of Professor Willdenow. The specimens from which the drawing was taken were obligingly communicated by Mr. Milne last September from Fonthill. The plant is annual, and according to Mr. Donn's Catalogue (where see Mimosa natans) was introduced to this country in 1802.



Desmanthus, natans

PLATE DCXXX.

ARDISIA LITTORALIS.

Seaside Ardisia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Stamens. One Style.

GENERIC CHARACTER.

CALYX 5-phyllus. Corolla hypocrateriformis. Antheræ magnæ, erectæ. Stigma simplex. Drupa supera, 1-sperma.	CUP 5-leaved. Blossom salver-shaped. Anthers large, erect. Stigma simple. Berry above, 1-seeded.

SPECIFIC CHARACTER.

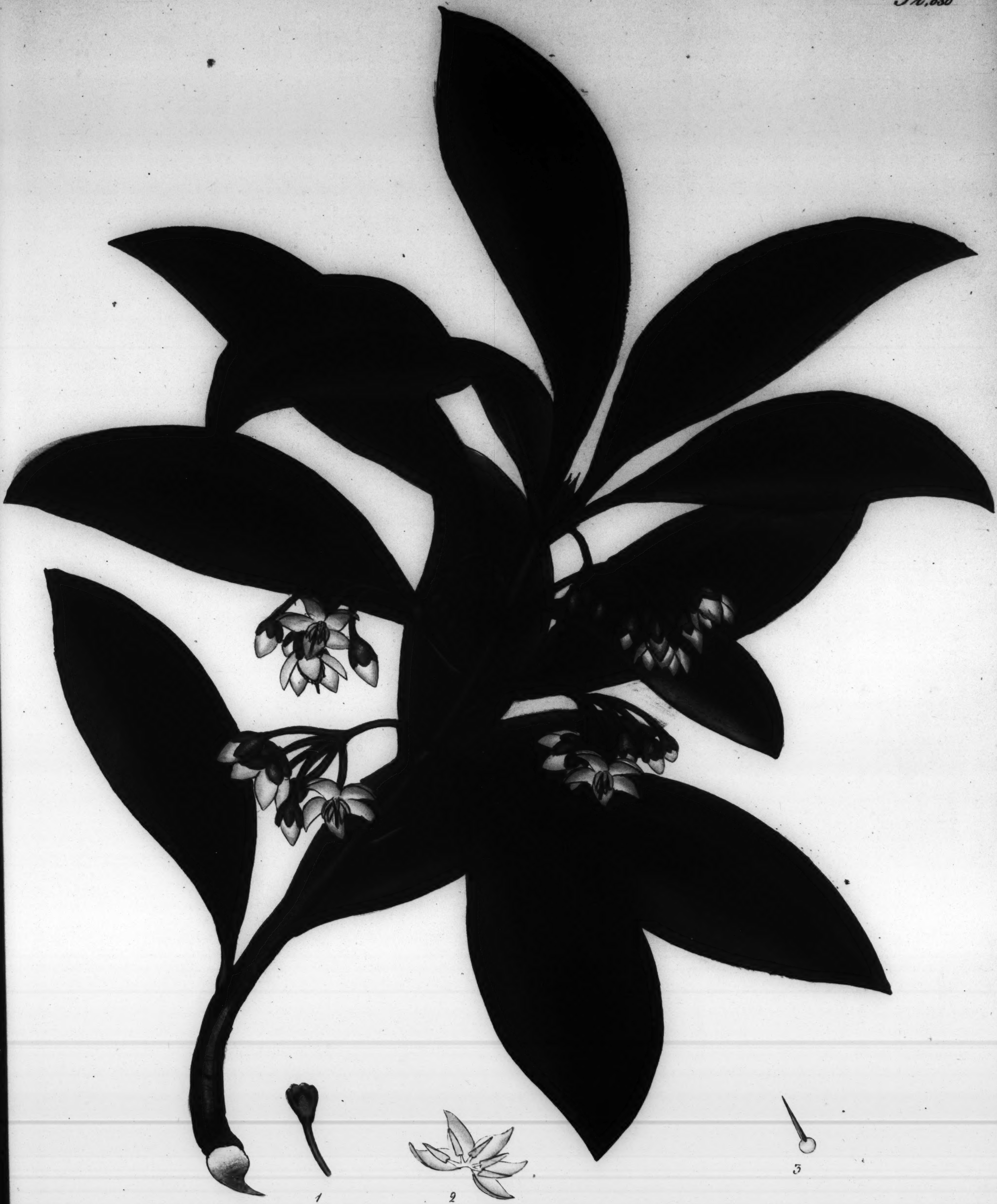
ARDISIA corymbis axillaribus, simplicibus; foliis obovato-ellipticis, integerrimis, coriaceis, planis.	ARDISIA with axillary simple corymbs and inversely ovate-elliptic, entire, leathery, flat leaves.

REFERENCE TO THE PLATE.

1. Empalement.
2. A blossom spread open.
3. Seed-bud and pointal.

THIS species was discovered growing wild on the shores of Pinang, and introduced at the same time with the Ardisia elegans; and flowered in the Stepney collection this year in October and November. The plant from which the drawing was taken is about three feet high; and we are informed by the collector, that the species is considerably dwarfer in Pinang than the A. elegans, and also much more bushy and compact.

Pl. 630



Ardesia, littoralis

PLATE DCXXXI.

STYRAX OFFICINALE.

Storax Tree.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Stamens. One Style.

GENERIC CHARACTER.

Calyx inferus. Corolla imo calyci inserta, subcampanulata, 3—8-partita. Antheræ 10—15. Germen triloculare, polyspermum. Drupa coriacea, subglobosa, 1—3-sperma.	Cup below. Blossom adhering to the base of the cup, nearly bell-shaped, 3- to 8-parted. Stamens 10 to 15. Germen of three cells with many seeds. Berry dry, leathery, nearly round. Seeds 1 to 3.

SPECIFIC CHARACTER.

Styrax foliis ovatis subtus villosis, racemis simplicibus folio brevioribus. *Ait. Kew.* 2. *p.* 75.	Styrax with the leaves oval, downy beneath, the racemes (bunches of flowers) simple, shorter than the leaf.

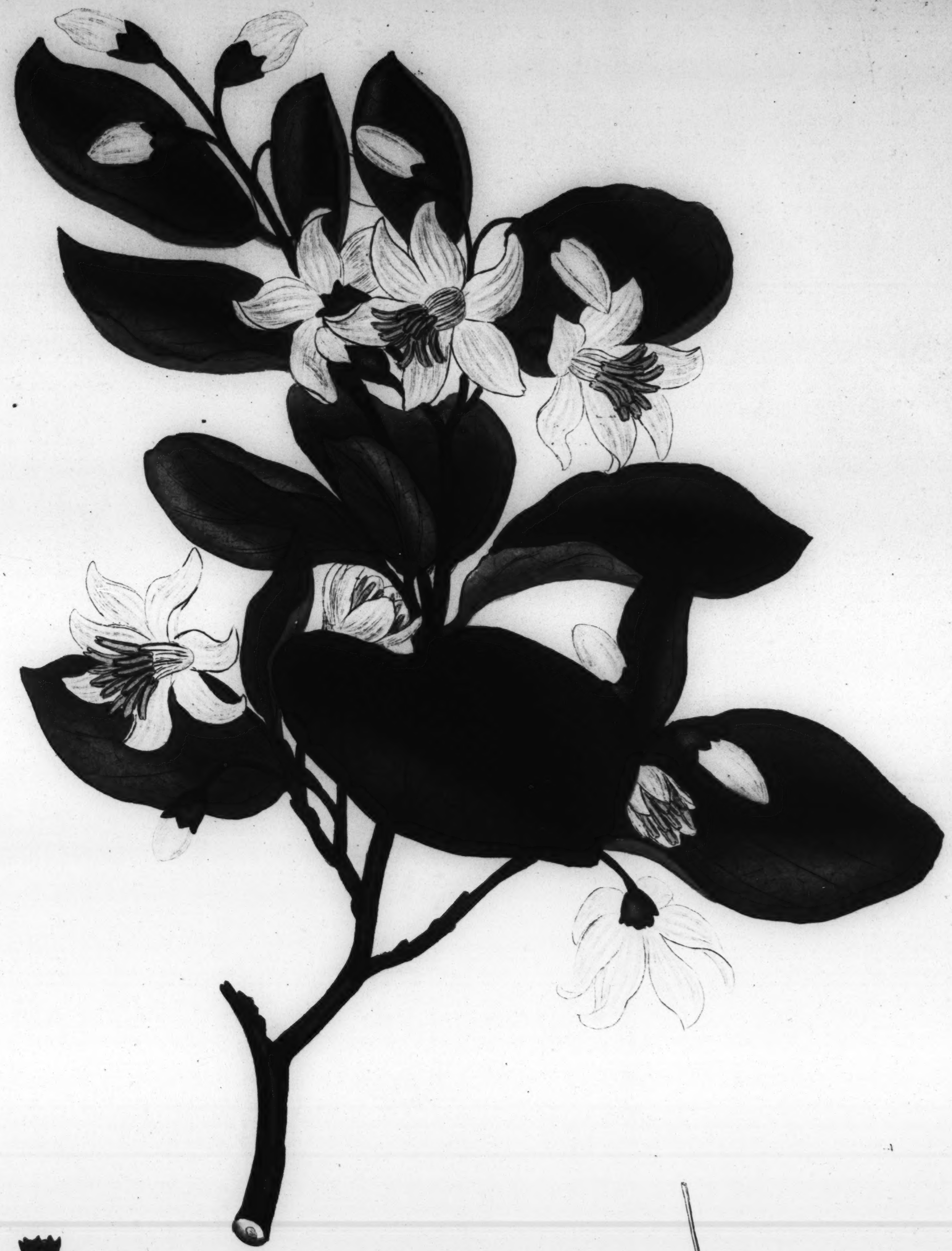
REFERENCE TO THE PLATE.

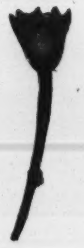
1. Empalement.
2. A blossom spread open.
3. Seed-bud and pointal.

The Storax tree is a native of the Levant, of Italy, and of the southern parts of Provence in France. The tree is very ornamental, but requires the shelter of a wall in this climate, and while young either to be kept in the green-house or covered during severe frosts. The time of flowering is June and July, but ripe fruits are rarely produced in this country. The principal importation of Storax is said to be from Turkey, where it is obtained both by gathering that which naturally exudes from the trees, and also by making artificial incisions, to which hollow reeds are affixed to receive it. From the accounts of some travellers published by Du Hamel, we learn that they generally adulterate it by mixing it with wax. The Storax-tree is by no means a new acquisition in this country. Gerard in his Herball, published in 1597, informs us that he had two small trees of it in his garden. It is however still a very scarce plant, and only to be found in a few of the principal collections, which, we are informed, is occasioned by the great difficulty of propagating it either by cuttings or layers.

The specimen was communicated, in the beginning of last June, from the well-known garden of the Company of Apothecaries at Chelsea.

Pl 60





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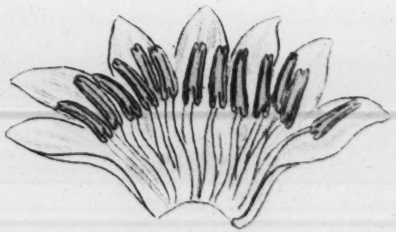

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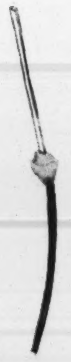

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Styrax officinale

PLATE DCXXXII.

CYTISUS ELONGATUS.

Elongated Cytisus.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Stamens.

GENERIC CHARACTER.

Calyx sub-bilabiatus. Stigma simplex. Legumen oblongum, compressum, polyspermum.	**Cup** sub-bilabiate. Stigma simple. Pod oblong, compressed, many-seeded.

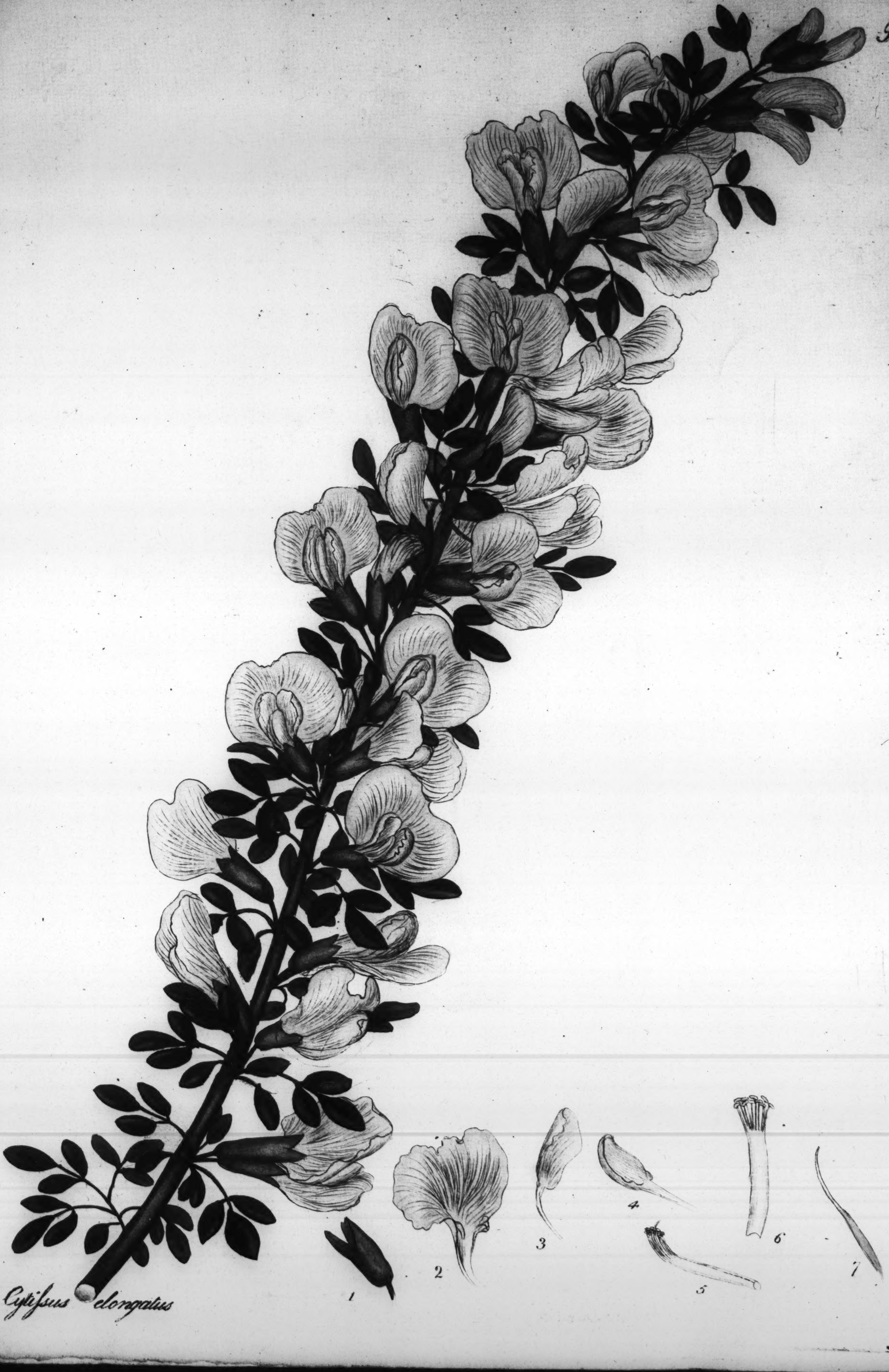
SPECIFIC CHARACTER.

Cytisus floribus pedunculatis, lateralibus, subquaternis; caule erecto: ramis elongatis; calycibus tubulosis; foliolis obovatis.—*Waldst. et Kit. Hung. v.* 2. *p.* 200. *t.* 183.	**Cytisus** with lateral flowers, commonly by fours, on footstalks; the stem erect; branches elongated; cups tubular, and leaflets inversely egg-shaped.

REFERENCE TO THE PLATE.

1. Empalement.
2. The vexillum.
3. One of the alæ.
4. The carina.
5. The chives.
6. The same spread open.
7. Seed-bud and pointal.

This ornamental species of Cytisus was discovered by Francis Count Waldstein and Dr. Kitaibel, in the county of Bereghi and the Banatian forests in the eastern parts of Hungary, during their botanical excursions in that before nearly uninvestigated region, and published in their Figures and Descriptions of the rare Plants of Hungary, above quoted, at Vienna in 1802. The plant was introduced to this country by Mr. Donn of Cambridge in 1808, and from fine flowering specimens which he communicated last May the present drawing was taken. The common height of the plant is said to be from three to five feet, and the thickness of the stem about an inch. It is perfectly hardy, and has not as yet been enumerated in any catalogue of plants cultivated in this country.



Cytiſsus elongatus

PLATE DCXXXIII.

LIATRIS ODORATISSIMA.

Sweet-scented Liatris.

CLASS XIX. ORDER I.

SYNGENESIA POLYGAMIA ÆQUALIS. **Tips United. Equal Polygamy.**

ESSENTIAL GENERIC CHARACTER.

Receptaculum nudum. Calyx oblongus, imbricatus. Pappus plumosus, coloratus.	**Receptacle** naked. Empalement oblong and tiled. Down feathery and coloured.

SPECIFIC CHARACTER.

Liatris foliis oblongis, sub-integerrimis, glabris, caulem amplexantibus. Caulis simplex, glaber. Flores paniculâ corymbosâ, divaricati. Calyx squamosus, lanceolatus, obtusus.	**Liatris** with oblong leaves nearly entire, smooth, and embracing the stem. Stem simple and smooth. Flowers grow in a corymbose panicle, straddling. The squamous empalement lanceolate and obtuse.

REFERENCE TO THE PLATE.

1. The empalement.
2. A flower.
3. The feathery down magnified.
4. A blossom spread open magnified.
5. Seed-bud and pointal.
6. A radical leaf.

We received the specimen from which our figure is taken from A. B. Lambert, esq., in whose stove it has flowered for the first time in this country. It was brought to England last year by Mr. Fraser from South Carolina. Many attempts have been before made to introduce it, but without success, as the plants either perished on the voyage, or very soon after their arrival. It is, we think, a great acquisition to our collections, on account of the great fragrance of its leaves when dried, which very much resembles the fine perfume of the Tonquin Bean, (*Dipterix odorata* Linn. Willd.) but more powerful, and which they will retain for many years, as Mr. Lambert has shown us some which have been kept in a box above ten years, and are as highly scented as ever. It seems at present too tender to flower without the assistance of the stove.

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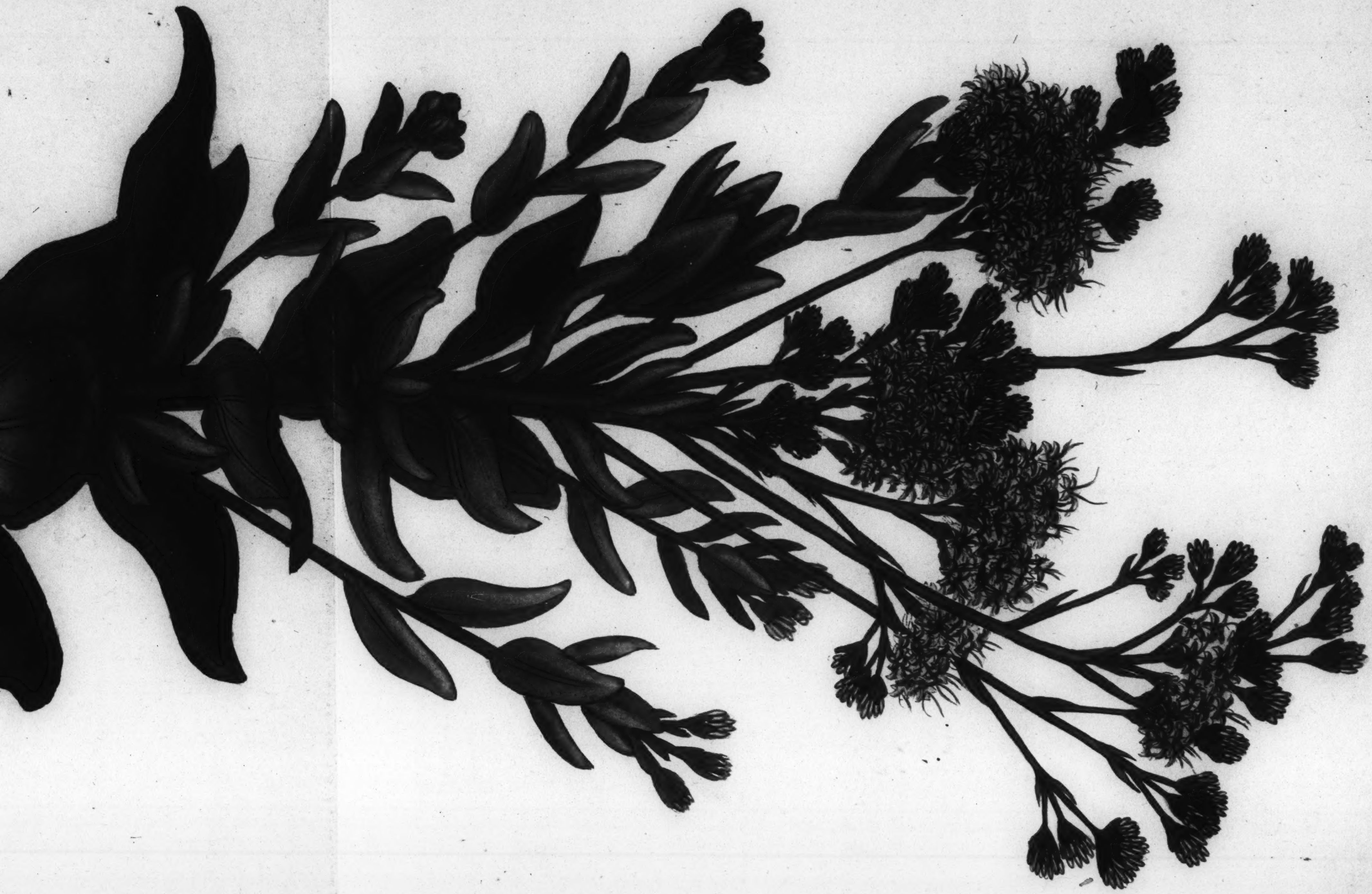


Pl 653

PLATE DCXXXIV.

PELIOSANTHES HUMILIS.

Humble Peliosanthes.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Stamens. One Style.

GENERIC CHARACTER.

Calyx nullus. Corolla 6-partita, subrotata; laciniis lato-ovatis, obtusis. Nectarium corollâ triplo brevius, incrassatum, integrum. Stamina sub ore nectarii affixa. Filamenta subnulla. Stylus brevissimus, obtusè trigonus. Stigma depressum. Germen inferum, 3-loculare; loculis dispermis. Bacca? subovata, carnosa.

Cup none. Blossom 6-parted, nearly wheel-shaped; the segments broadly ovate, blunt. Nectary three times shorter than the corolla, fleshy, entire. Stamens affixed under the mouth of the nectary. Filaments scarcely any. Style short, bluntly three-sided. Stigma depressed. Germen below, three-celled; the cells two-seeded. The fruit fleshy, nearly oval.

SPECIFIC CHARACTER.

Peliosanthes foliis elliptico-lanceolatis subseptemnerviis scapo longioribus; bracteis flores æquantibus; racemo subovato.

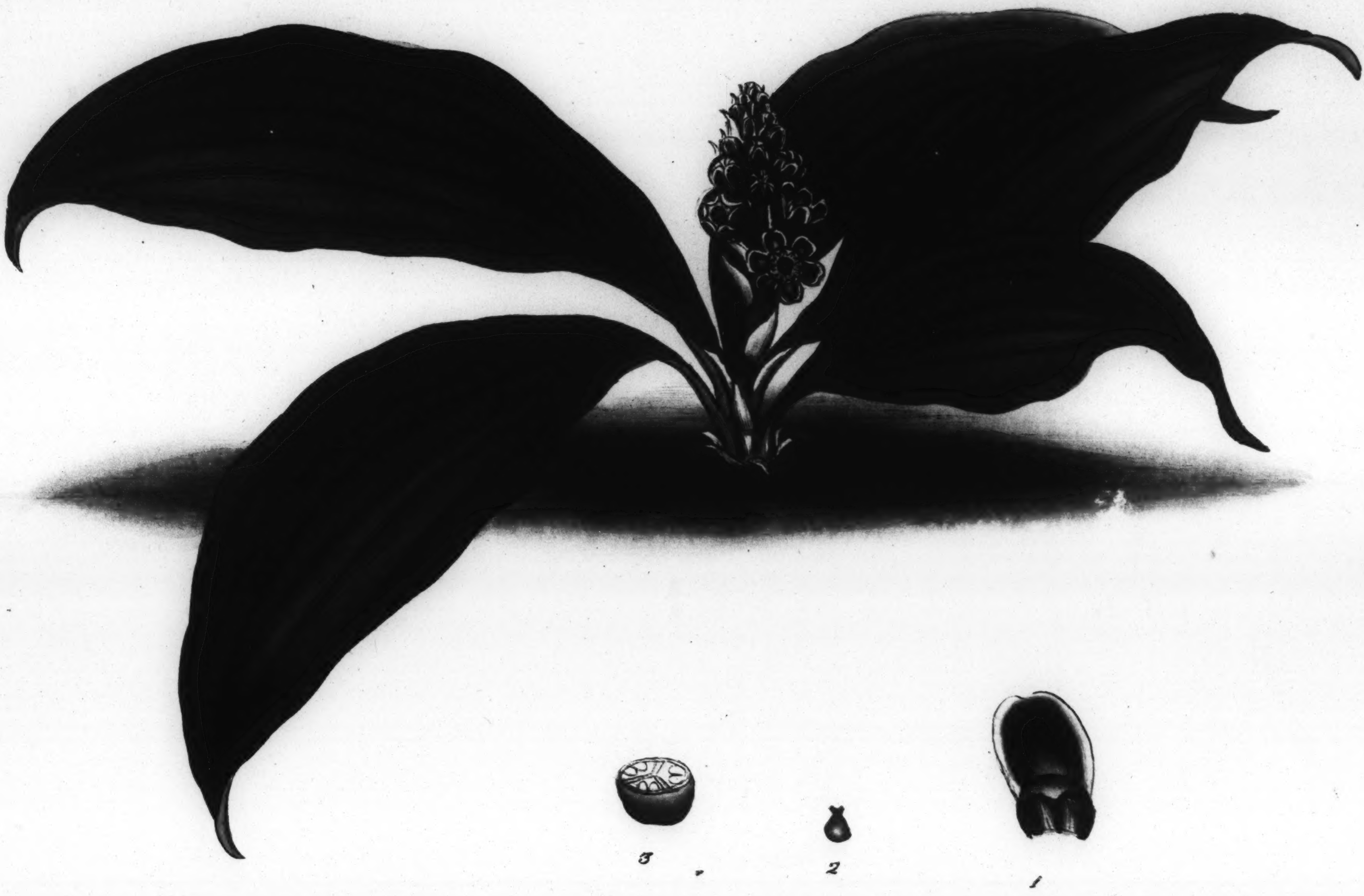
Peliosanthes with elliptic-lanced seven-nerved leaves longer than the scape; the bracts equalling the flowers in length, and the bunch ovate.

REFERENCE TO THE PLATE.

1. A segment of the flower magnified.
2. Seed-bud and pointal.
3. Seed-bud cut transversely, magnified.

This is one of the species referred to in our description No. 605, and flowered last November in the collection of T. Evans, Esq. at Stepney; where we were informed, that it grows naturally in shady woods in Pinang, or Prince of Wales's Island, and was introduced to this country in 1808. Its beauty is certainly far inferior to the Bengal species, with which however it agrees very well in essential characters; but the nectary here nearly resembles a little cup, and is not contracted above, as in that species. The height of the plant above ground is only about two inches.

Pl. 634



Peliosanthes, humilis

PLATE DCXXXV.

CELOSIA CERNUA.

Nodding Celosia.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Stamens. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx triphyllus. Corolla pentapetala. Stamina basi nectarii plicata, conjuncta. Capsula horizontaliter dehiscens.

Empalement three-leaved. Blossom five-petalled. Stamens at the base of the nectary, folded, and joined together. Capsule splitting horizontally.

SPECIFIC CHARACTER.

Celosia floribus in spica aggregata, cernuis; foliis lanceolatis cum petiolis longis. Caulis costatus.

Celosia cernua. *Roxb. MSS.*

Celosia with flowers growing in an aggregate spike, nodding. Leaves lance-shaped, with long footstalks. Stem ribbed.

REFERENCE TO THE PLATE.

1. Empalement and blossom.
2. The stamens.
3. A stamen magnified.
4. Seed-bud and pointal, summit magnified.

This elegant little annual was raised from seed last year (1810) in the collection of Sir A. Hume, Bart. who communicated a fine specimen of it, from which our drawing was begun, and finished from another plant of equal beauty sent to us by A. B. Lambert, esq. last month. It is a brilliant addition to the stove. Native of the Raja Mahl hills, and not mentioned by any one but Dr. Roxburgh in his Plants of the Coast of Coromandel.

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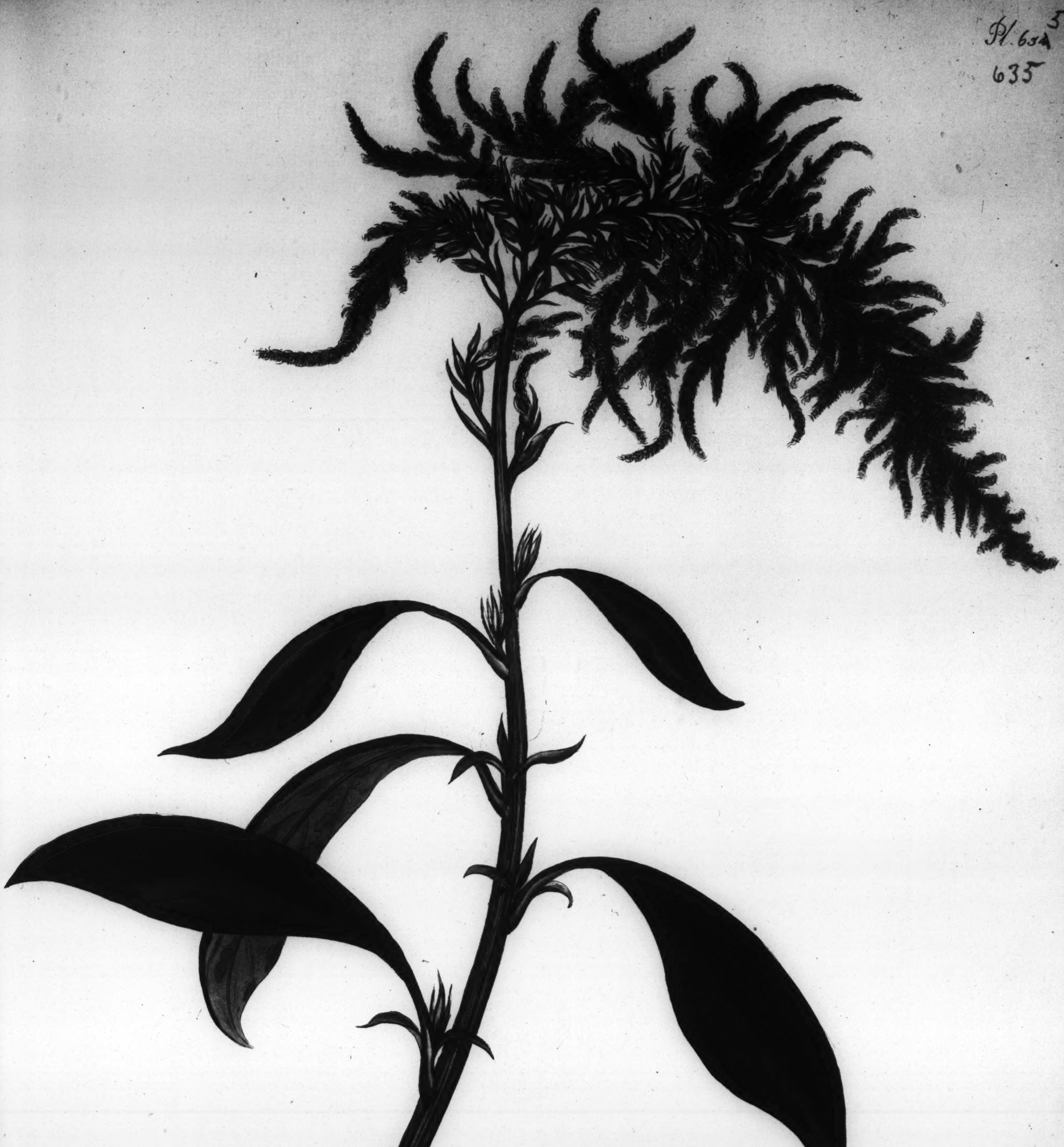
Pl. 634
635



Celosia, cernua

PLATE DCXXXVI.

IPOMŒA INSIGNIS.

Magnificent Ipomœa.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. **Five Stamens. One Style.**

GENERIC CHARACTER.

Calyx 5-partitus. Corolla campanulata v. infundibuliformis, 5-plicata. Stigma capitatum, 2- vel 3-lobum. Capsula 2-3-locularis.	Cup 5-parted. Blossom bell- or funnel-shaped, 5-plicate. Stigma headed, 2- or 3-lobed. Capsule of 2 or 3 cells.

SPECIFIC CHARACTER.

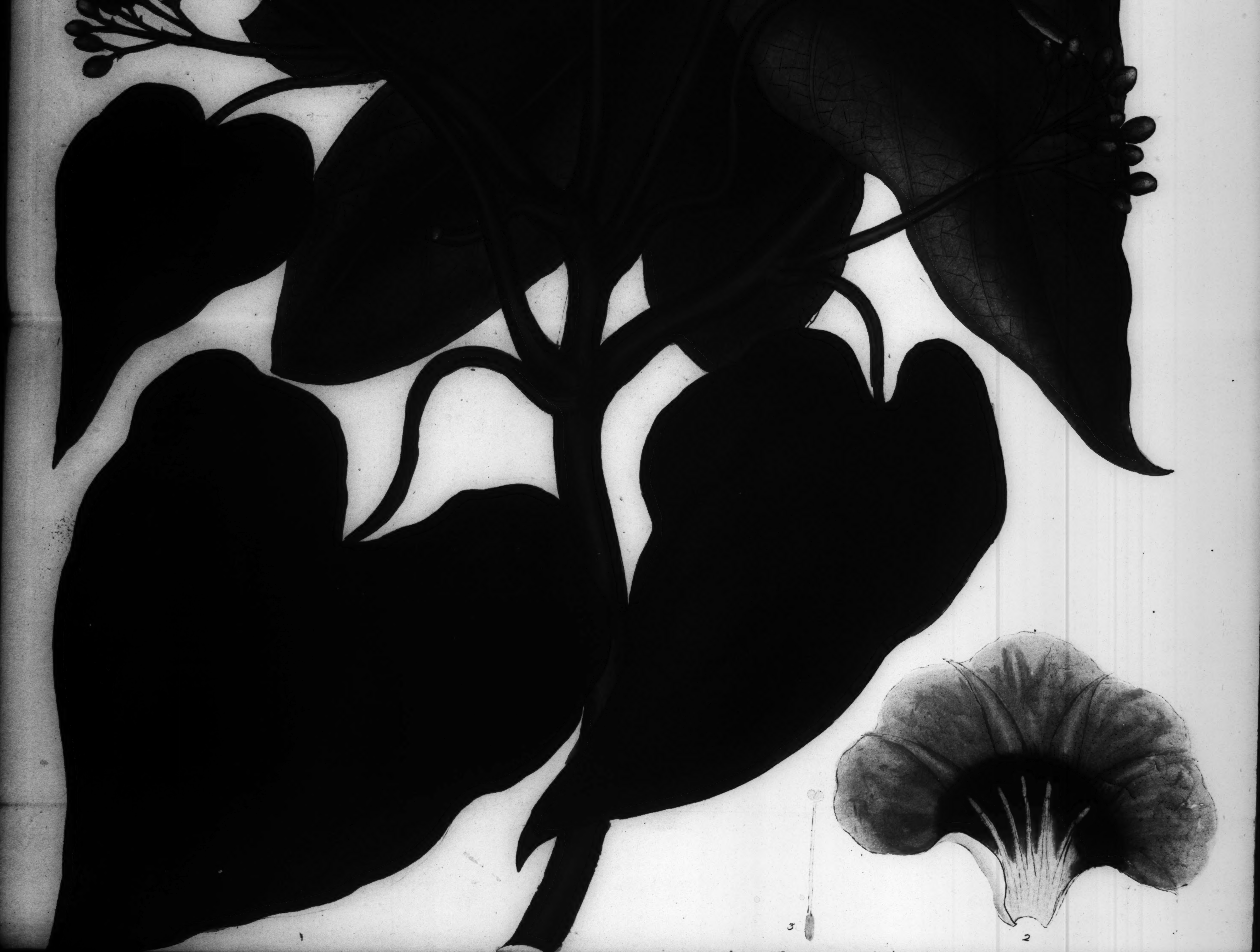
Ipomœa caule volubili longissimo et ramosissimo, glabro; foliis crassis, glabriusculis, inferioribus palmato-quinquelobis; superioribus cordato-ovatis ovatisque; mediis subtrilobis: umbellis pedunculatis, axillaribus, compositis, multifloris.	Ipomœa with a turning smooth stem exceedingly long and branching; the leaves fleshy, nearly smooth, the lower palmate-5-lobed; the upper ovate, or a little heart-shaped; the intermediate commonly 3-lobed: the umbels axillary upon footstalks, compound, and bearing many flowers.

REFERENCE TO THE PLATE.

1. A leaf from the base of the plant.
2. A blossom spread open.
3. Seed-bud and pointal.

This remarkable species of Ipomœa was brought from Mrs. Benyon's hothouse at Englefield, Berkshire, last August, where the plant, after rising to the top of the trellis, extends both right and left to a length of about 30 feet, branching in various directions with hundreds of bunches of flowers. The foliage is singular as to texture, varieties of form, and colour; the lower leaves being of a strong purple on their under side, and dark green above. The plant is perennial, and continues flowering during the greatest part of the summer, but does not ripen its seed—most probably owing to the extreme luxuriance of its inflorescence. All our attempts to discover its native soil, or time of introduction, have proved abortive; neither have we been able to find that any account of it has before been published, or any specimens of it in herbariums.

The propagation is by cuttings; and we are informed that Mr. Lambert, who favoured us with the specimens, is already in possession of some very fine plants of it.



Ipomœa insignis

Pl. 636

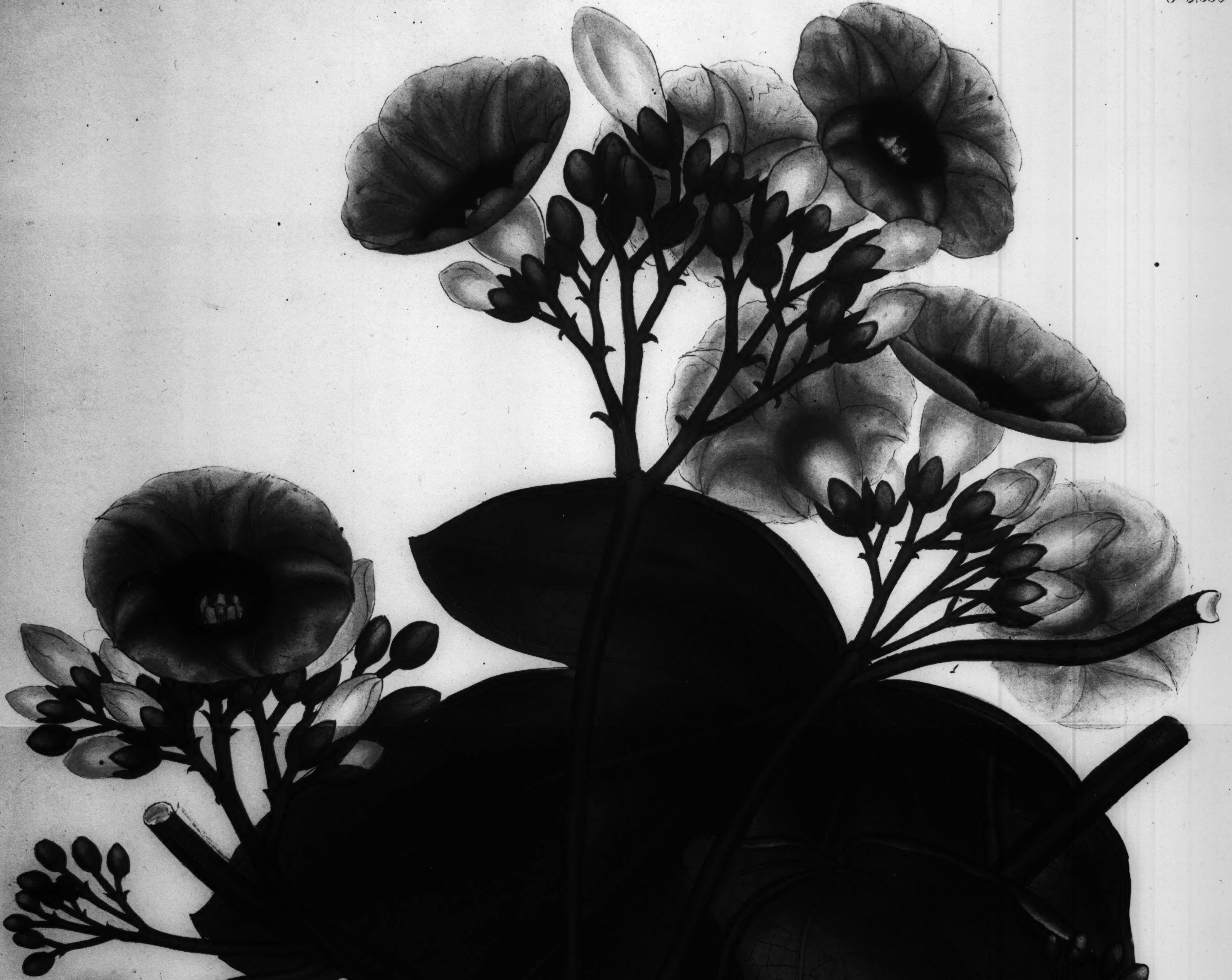


PLATE DCXXXVII.

TRICHILIA ODORATA.

Sweet-scented Trichilia.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx 4—5-dentatus. Petala 4—5. Nectarium cylindricum, in apice dentatum, antheras 8—10 gerens. Capsula 3-locularis, 3-valvis. Semina baccata.

Empalement 4—5-toothed. Petals 4 or 5. Nectary cylindrical, toothed at the end, and bearing from 8 to 10 stamens. Capsule 3-celled, 3-valved. Seeds berries.

SPECIFIC CHARACTER.

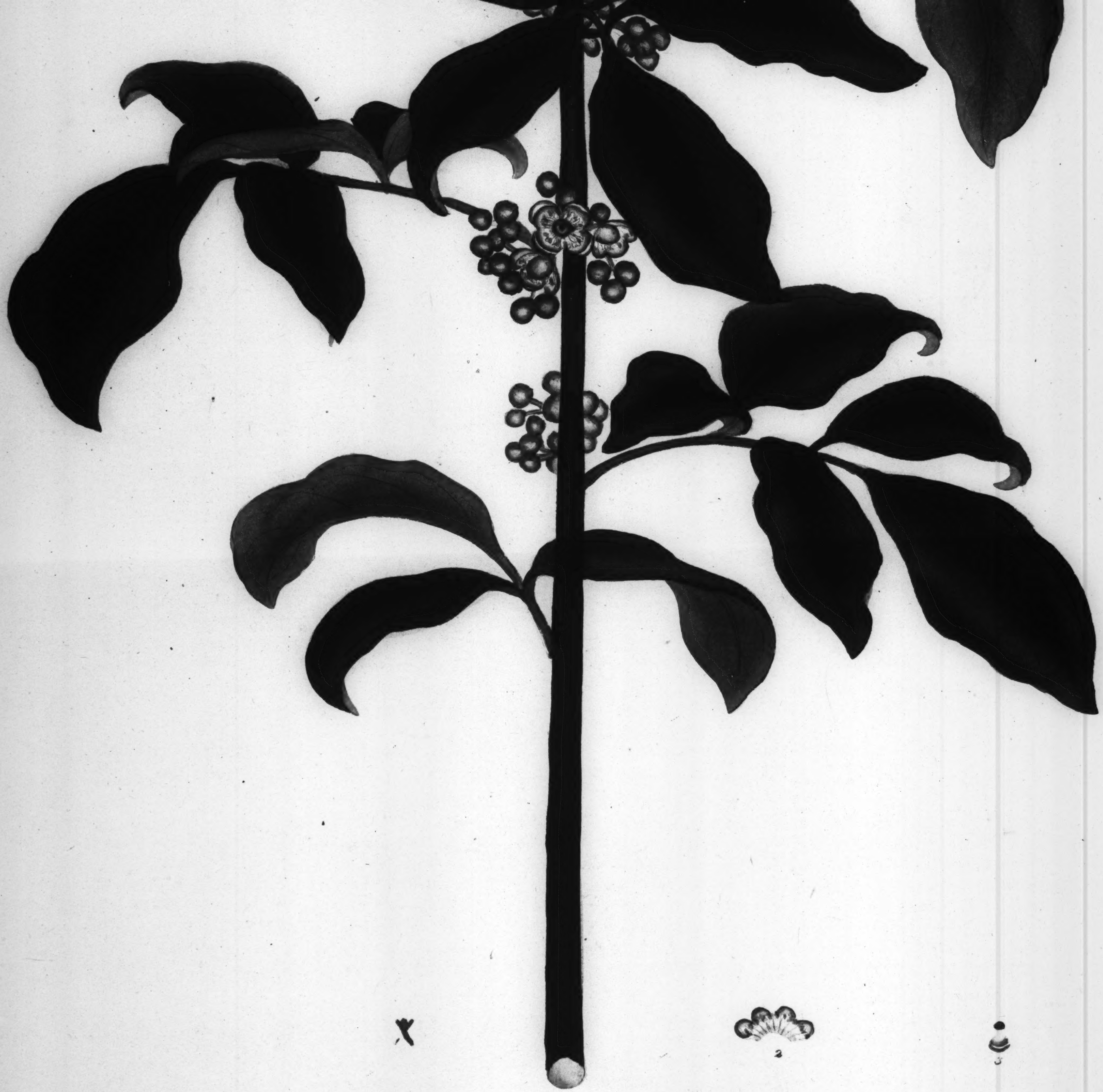
Trichilia petalis quatuor et decem antheris: foliis pinnatis: foliolis lanceolatis, undulatis: floribus axillaribus; caule erecto, moschato.

Trichilia with four petals and ten stamens. Leaves pinnated: leaflets lance-shaped and undulated. Flowers grow from the axils of the leaves. Stem upright, and musk-scented.

REFERENCE TO THE PLATE.

1. Empalement.
2. Blossom spread open.
3. Seed-bud and pointal.

The genus Trichilia is certainly at present in a confused state, from the latitude annexed to it of 4 to 5 petals, and 8 to 10 stamens. It appears to contain at least two genera. This fine species is said to have been sent over to England from the botanic garden in the Island of St. Vincent's by Doctor A. Anderson about the year 1801, and is not we believe (at present) in any other collection but that of Sir Abraham Hume, who favoured us with the specimen here delineated in fine bloom last summer (1810). It possesses the same fragrance that is attributed to the Trichilia moschata, of which we have never seen specimens.



Trichilia odorata

Pl. 637

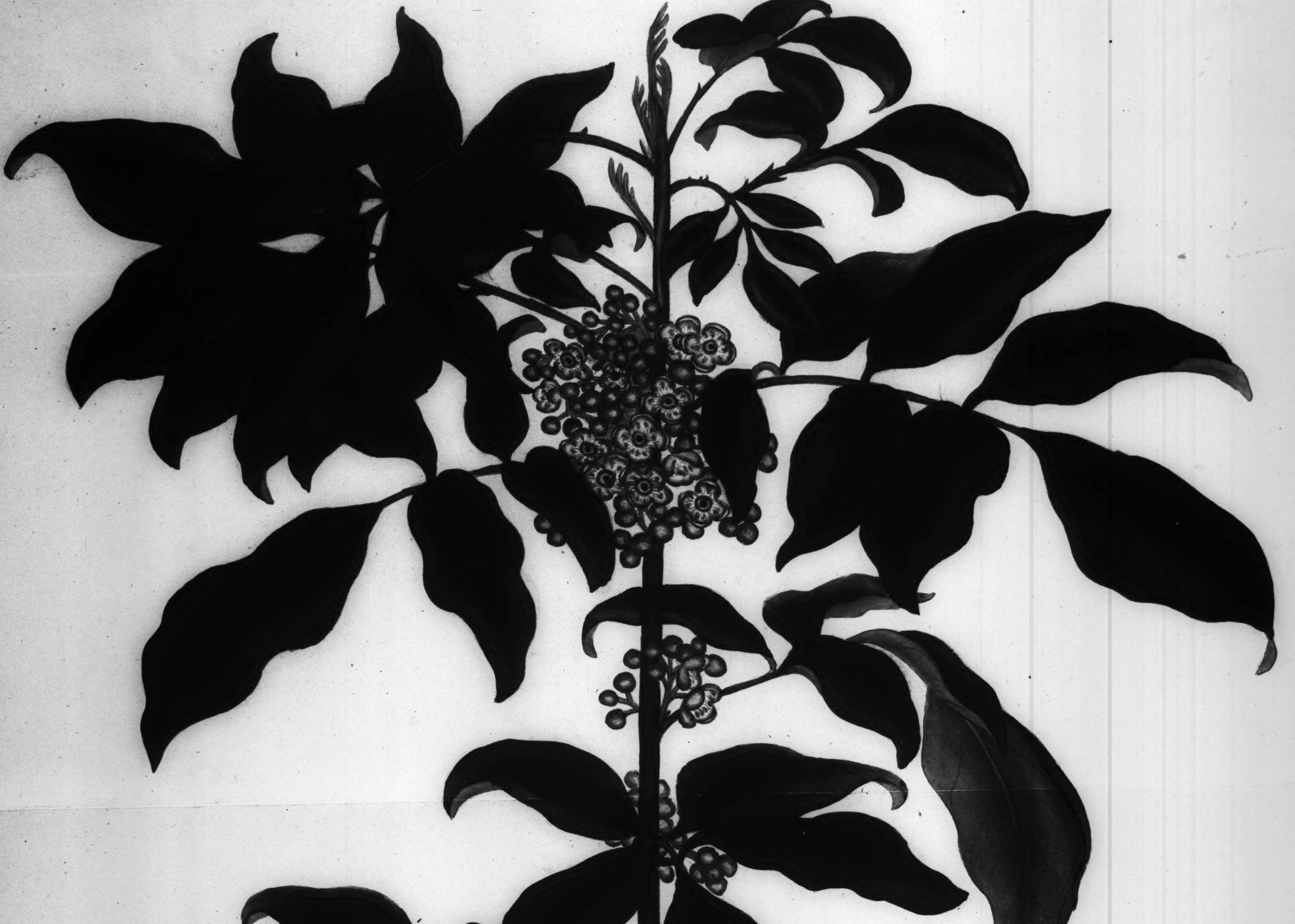


PLATE DCXXXVIII.

DAVIESIA LATIFOLIA.

Broad-leaved Daviesia.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

GENERIC CHARACTER.

Calyx angulatus, simplex, quinquefidus. Corolla papilionacea. Stylus subulatus. Stigma simplex, acutum. Legumen compressum, monospermum.	Cup angled, simple, 5-cleft. Blossom butterfly-shaped. Shaft awl-shaped. Summit simple, acute. Pod compressed, one-seeded.

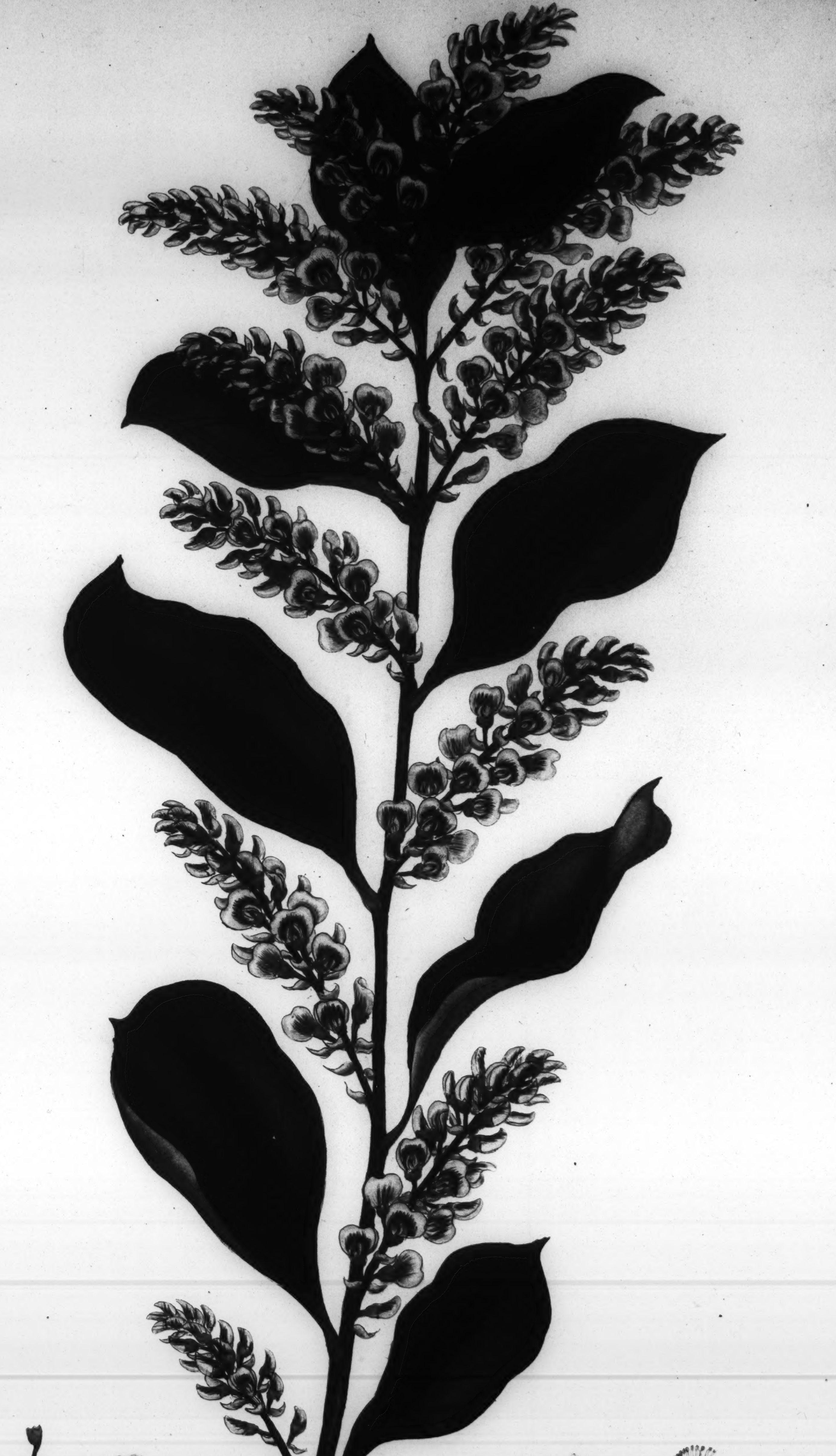
SPECIFIC CHARACTER.

Daviesia spicis multifloris, axillaribus: foliis late lanceolatis, undulatis: calyce regulari.	Daviesia with spikes of many flowers, axillary: leaves broadly lance-shaped, and undulated. Cup equal.

REFERENCE TO THE PLATE.

1. The empalement.
2. The standard.
3. One of the wings.
4. The keel.
5. The chives spread open.
6. Seed-bud and pointal.

This little shrub from New Holland is both new and beautiful, well adapted to grace any collection, being of easy culture, small in size, with abundance of brilliant little flowers growing from the axils of every leaf. The specimen we have delineated was communicated to us by Mr. J. Milne, from the Font Hill gardens, in fine bloom, in the month of April 1811.



Davresia, latifolia

PLATE DCXXXIX.

CARIX FRASERI.

Fraser's Carex.

CLASS XXI. ORDER III.

MONŒCIA TRIANDRIA. One House. Three Stamens.

GENERIC CHARACTER.

Masculi flores.	*Male flowers.*
Amentum imbricatum. Calyx squamosus, solitarius. Corolla nulla.	**Catkin** tiled. Empalement skinny and solitary. Blossom none.
Feminei flores.	*Female flowers.*
Amentum imbricatum. Calyx squamosus, solitarius. Corolla monopetala, apice bidentata. Stigmata 2 seu 3. Nux triquetra, corolla persistente inclusa.	**Catkin** imbricated. Empalement skinny and solitary. Blossom one-petalled, with two teeth at the end. Summits two or three. Nut three-sided, within the persistent blossom.

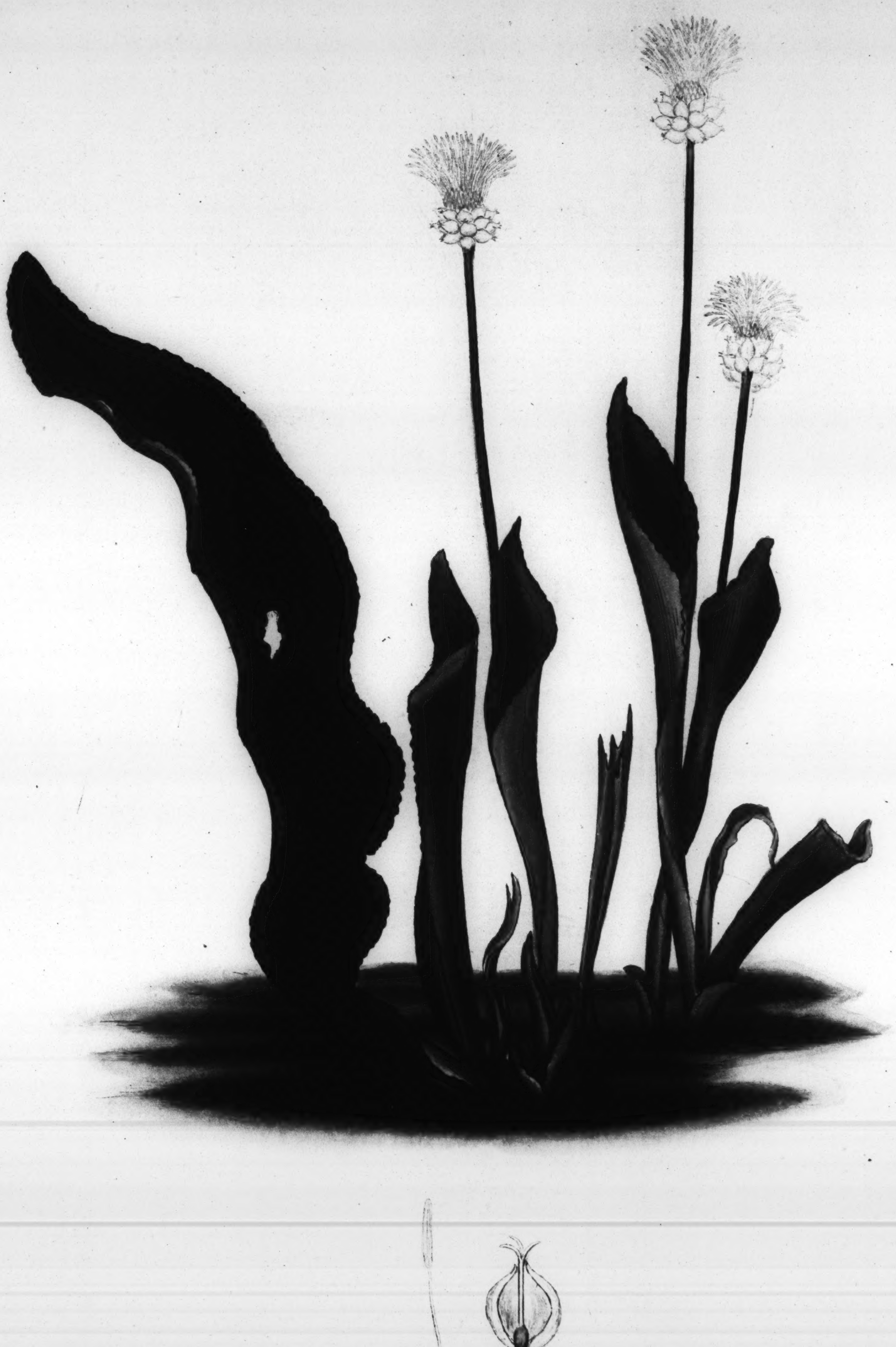
SPECIFIC CHARACTER.

Carex floribus androgynis capitibus terminalibus; masculis superioribus, femineis inferioribus. Stigma tripartitum: foliis lanceolatis, undulatis, marginibus crenulatis.	**Carex** with hermaphrodite flowers growing in terminal heads; male flowers above, females beneath. Summit three-parted. Leaves lance-shaped, undulated, with finely scolloped margins.

REFERENCE TO THE PLATE.

1. A stamen magnified.
2. A blossom spread open, magnified.

For this curious little plant we are indebted to the late Mr. Fraser, nurseryman, Sloane Square, Chelsea; whose ardour in the pursuit of plants carried him thrice over to America in search of botanic novelty. Mr. J. Fraser informs us, that his father and himself discovered this singular species of Carex, in the autumn of 1808, near the Table Mountain, and upon the banks of the Catawba River in the neighbourhood of Morgan Town, North Carolina.



Carex, Fraseri

PLATE DCXL.

HELICONIA BIHAI.

Wild Plantain Tree.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Spatha universalis partialisque. Calyx 0. Corolla 3-petala. Nectarium 2-phyllum. Capsula 3-locularis, monosperma.

Spathe common and partial. Empalement none. Blossom 3-petalled. Nectary two-leaved. Capsule 3-celled, one-seeded.

SPECIFIC CHARACTER.

Heliconia foliis ad apicem acutis, spadice erecto, radicalibus. Spatha disticha, multiflora: nectarii folio superiore trifido.
Heliconia Bihai. *Willd. Sp. Pl.*

Heliconia with leaves pointed at the end, with an upright spadix, radical. Spathe two-sided, with many flowers. The upper leaf of the nectary trifid.

REFERENCE TO THE PLATE.

1. The plant in miniature.
2. A flower.
3. A blossom spread open.
4. Seed-bud and pointal, summit magnified.
5. A transverse section of the seed-bud.

This fine species of Heliconia is known by the common appellation of the Wild Plantain Tree, and grows in mountainous boggy places in South America, and also in most of the West India Islands. It is not generally cultivated with us, on account of the room it occupies, its elegant large foliage being but ill adapted to the confinement of the stove. Our figure was made about the middle of April, from a plant in the collection of the Countess de Vandes.

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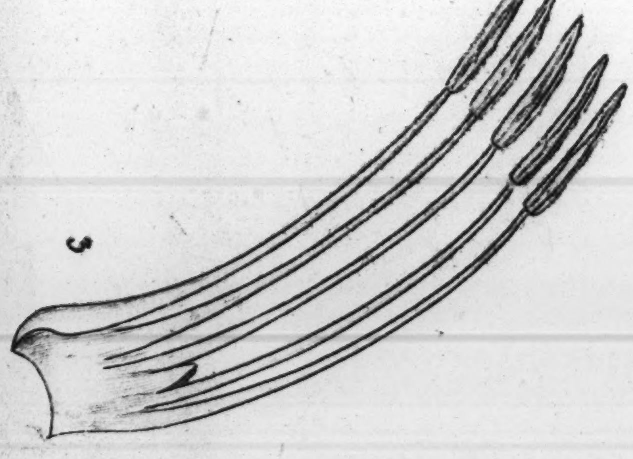

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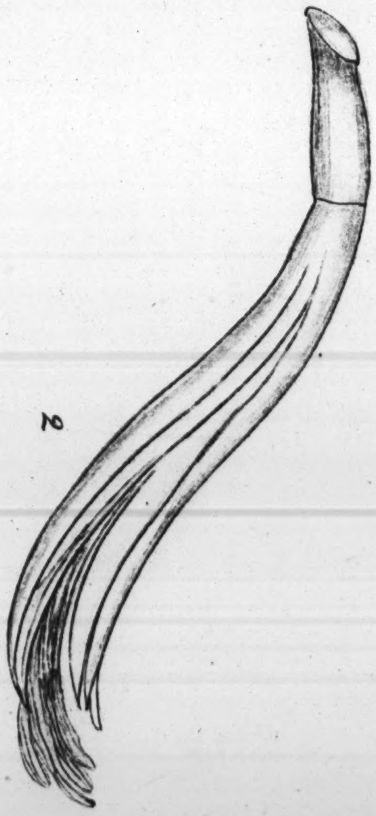


Pl. 630

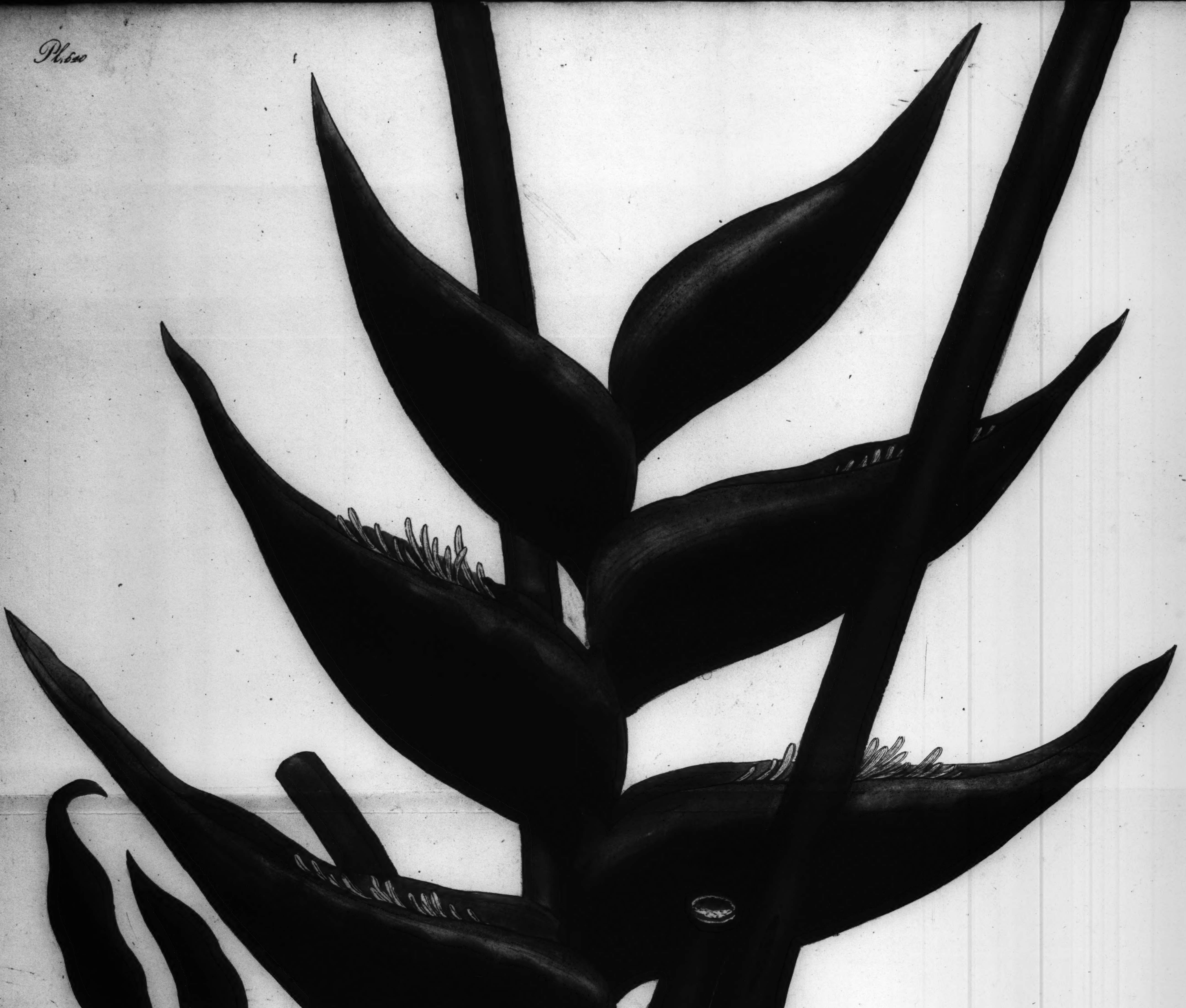


PLATE DCXLI.

PROSTANTHERA LASIANTHOS.

Downy-flowered Prostanthera.

CLASS XIV. ORDER I.

DIDYNAMIA GYMNOSPERMIA. Two Chives longer. Seeds naked.

GENERIC CHARACTER.

Calyx post florescentiam clausus, utroque labio integerrimo. Corolla monopetala, lanata, ringens; antheris appendiculatis: baccæ quatuor, monospermæ: foliis petiolatis: pedunculis lanceolatis, serratis: floribus paniculis axillaribus terminalibusque: ramulis oppositis, quadrangularibus.

Habitat in Capite Van Diemen.

Labillardiere Nova Hollandia, vol. ii. p. 18. tab. 157.

The empalement after flowering shuts, both segments entire. Blossom one-petalled, woolly, gaping: chives with an appendage: berries four, one-seeded: leaves with petioles: footstalks lance-shaped, and sawed: flowers terminate the branches in panicles from the axils of the leaves: branches opposite, and four-sided.

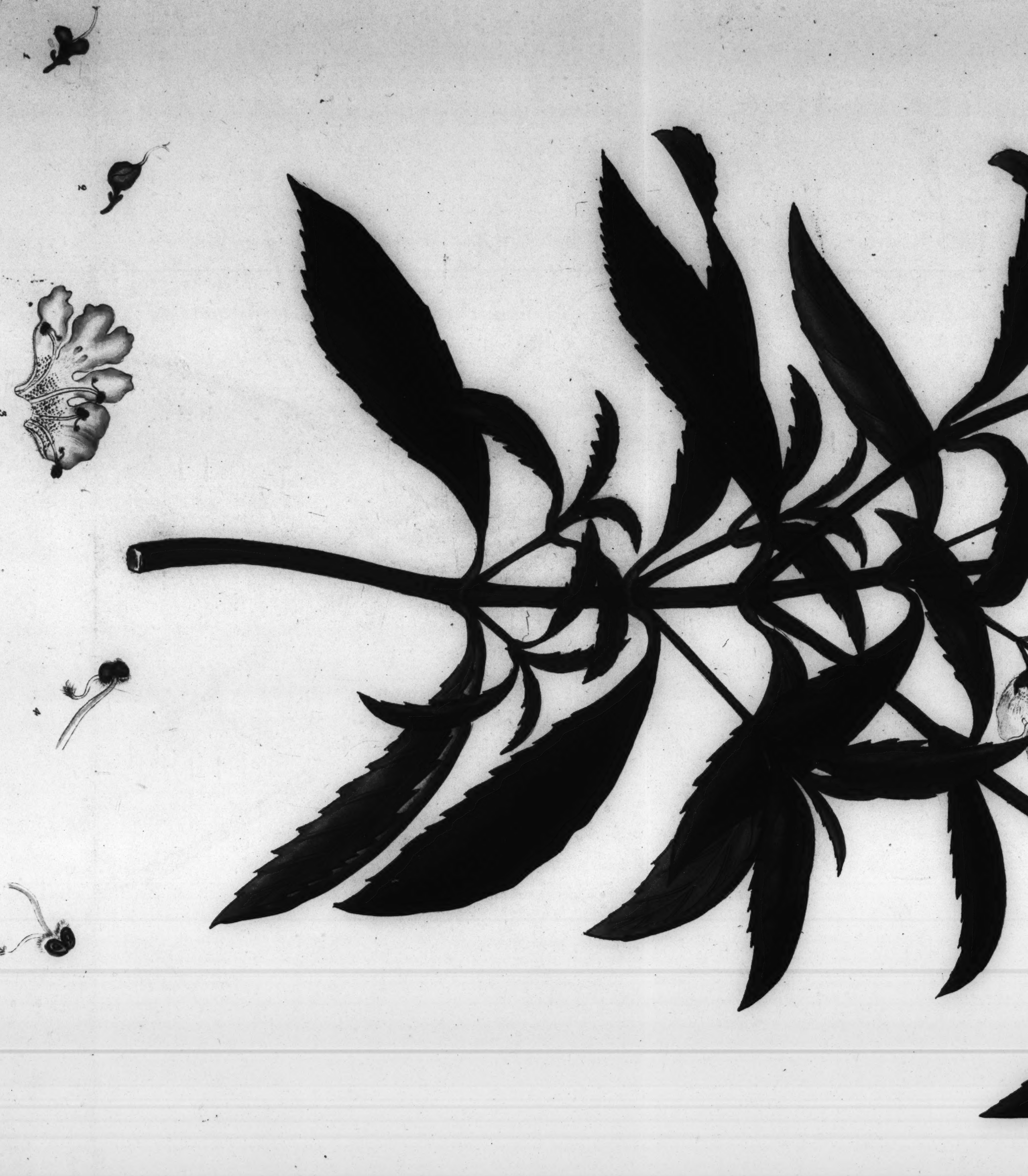
Native of Van Diemen's Land.

REFERENCE TO THE PLATE.

1. The empalement, seed-bud and pointal.
2. The same as it appears after flowering.
3. A blossom spread open.
4. A chive magnified.
5. The same shown from the inner side, magnified.

This fine plant is perfectly new to the British gardens, and the only species of a genus named and figured by Labillardiere in his *Nova Hollandia*, or Description of New South Wales.

It was raised from seed in the summer of 1807, in the collection of the Right Hon. Lord Grenville, at Dropmore, who favoured us with specimens in full bloom, last June, 1811, being the first time of its flowering in this country. His Lordship's botanic gardener informs us that the plant is about eight feet high, and the stem one inch and a quarter in diameter; that during the first year it had the appearance of being herbaceous, but afterwards became woody; its growth is very luxuriant, flowering at the termination of every branch, and seems as if it would thrive in any sort of earth, and was nearly if not quite hardy, as the roots remained in the ground one year at Dropmore, and shot up strong again in the summer. It may be increased by cuttings, and will be found not only an acquisition in point of novelty, but ornamental from its numerous light graceful blossoms, which possess an agreeable fragrance.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Pl. 641

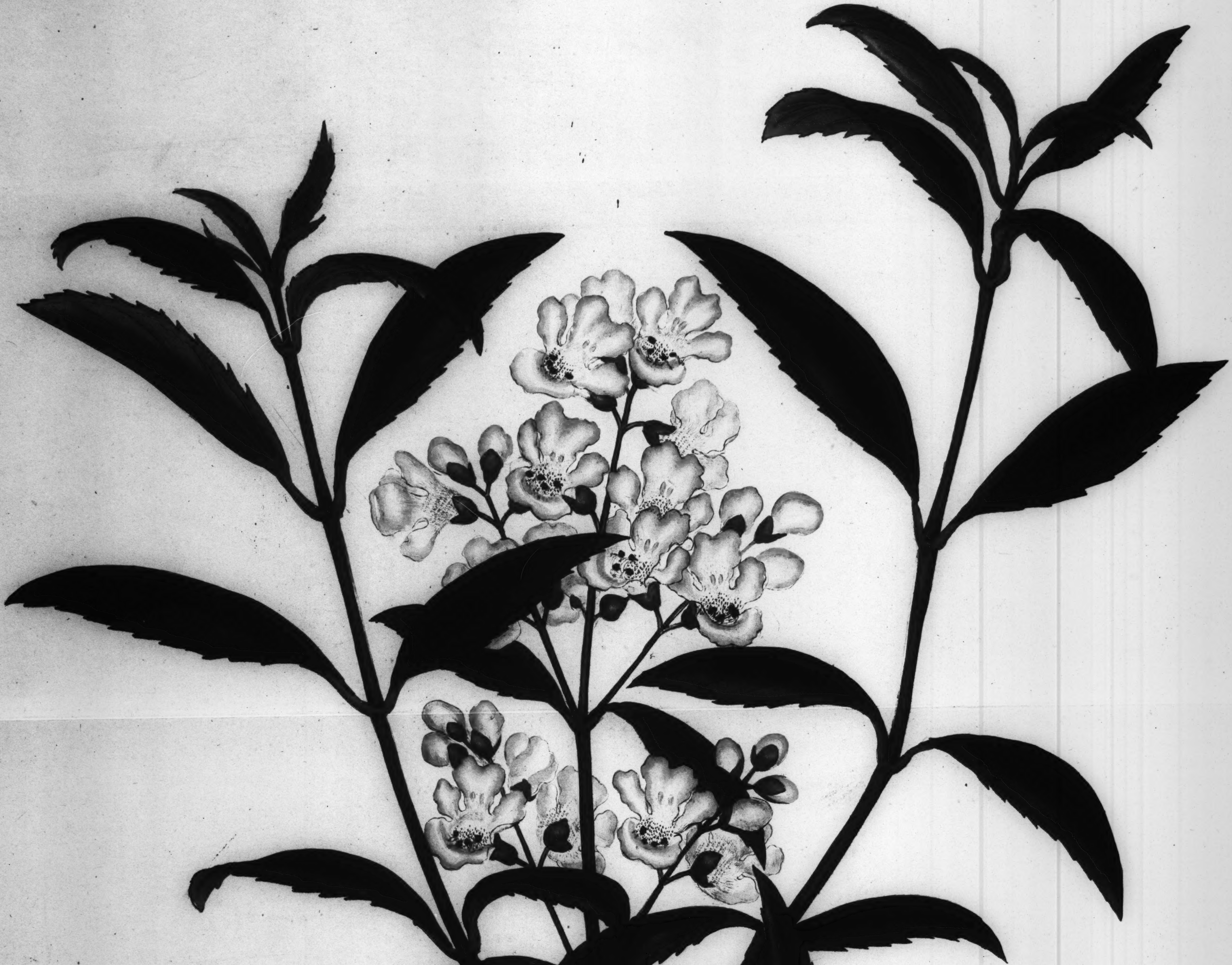


PLATE DCXLII.

GOMPHOLOBIUM GRANDIFLORUM.

Large-flowered Air Pod.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx campanulatus, simplex, alte 5-fidus. Corolla papilionacea. Stigma simplex, acutum. Legumen inflatum, sphæricum, uniloculare, polyspermum.	Empalement bell-shaped, simple, deeply five-cleft. Blossom butterfly-shaped. Summit simple, acute. Pod inflated, spherical, one-celled, many-seeded.

SPECIFIC CHARACTER.

Gompholbium foliis ternis vel quinis, linearibus, apice mucronatis: corollis coccineis: pedunculis basin versus bibracteatis: caule volubili.	Gompholobium with leaves in threes and fives, linear, and mucronated at the end: blossoms of a scarlet colour: peduncles with two floral leaves near the base: stem climbing.

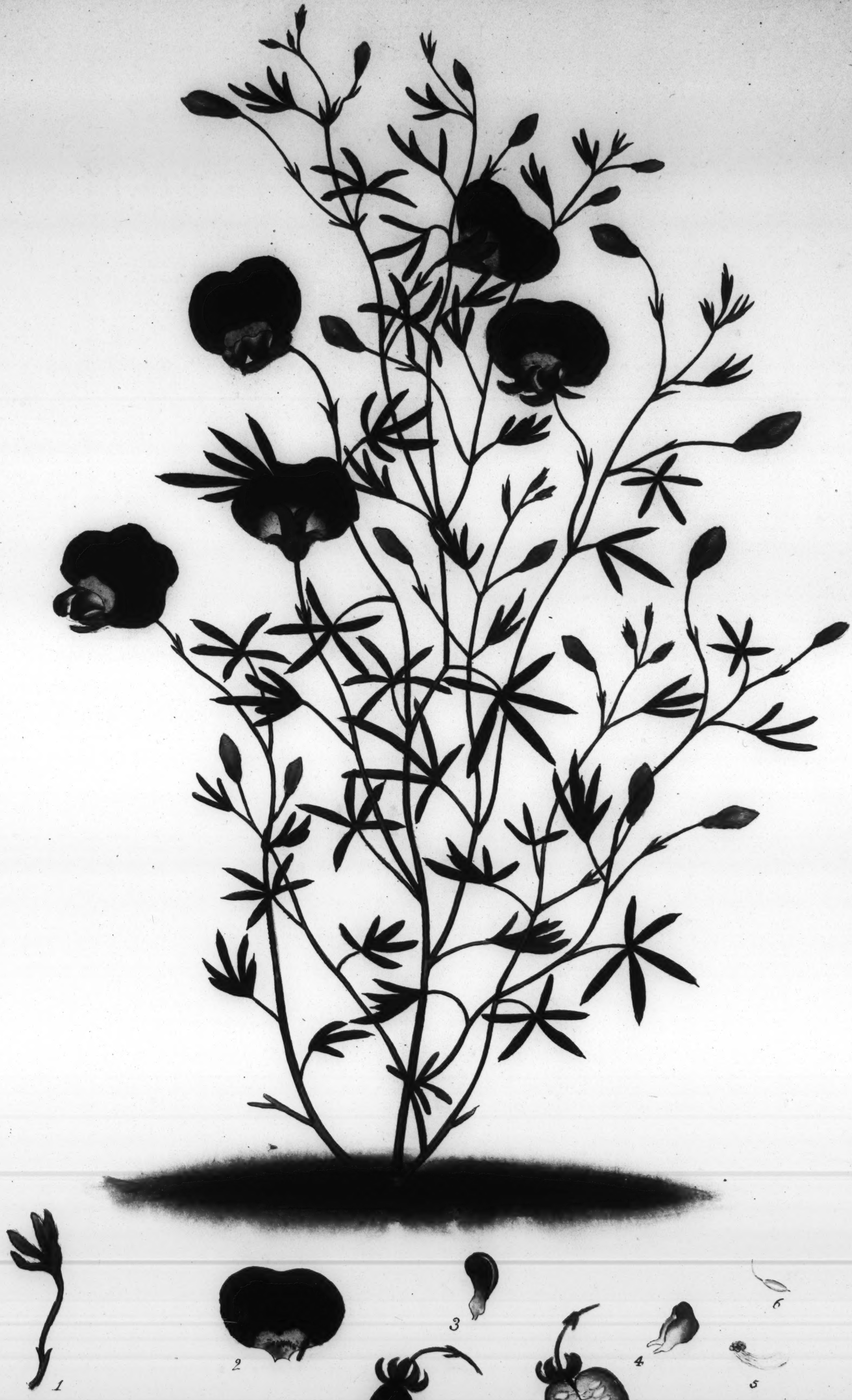
REFERENCE TO THE PLATE.

1. The empalement and floral leaves.
2. The standard.
3. One of the wings.
4. The keel.
5. The chives and pointal.
6. Seed-bud and pointal.
7. A ripe seed-vessel.
8. The same split open.

This nondescript species of Gompholobium is, when in flower, the most elegant of the genus, but when out of bloom few plants have less attraction.

It was first raised in the Royal gardens at Kew, about the year 1809, and is as yet in very few collections. Our figure represents an entire plant from the conservatory of the Countess de Vaudes, which flowered in the month of June 1811, and perfected its seed about the middle of September, at which period its slender branches had grown nearly six inches longer (than they were when in bloom), and, twining round a small stick placed for their support, had every appearance of becoming a graceful climbing plant.

Pl. 642



Gompholobium, grandiflorum

PLATE DCLXIII.

JUSTICIA BICOLOR.

Two-coloured-flowered Justicia.

CLASS II. ORDER I.

DIANDRIA MONOGYNIA. Two Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx simplex seu duplex. Corolla 1-petala, irregularis. Capsula ungue elastico dissiliens : dissepimentum contrarium adnatum.

Empalement simple or double. Blossom one-petalled, irregular. Capsule splitting with an elastic claw : partition contrary to the valve affixed.

SPECIFIC CHARACTER.

Justicia fruticosa : foliis ellipticis : floribus plerumque ternis : pedicellis calycibusque hirsutis : caule terragono.

Habitat in Insula Jamaicæ.

Justicia with a shrubby stem : leaves elliptic : flowers mostly by threes : footstalks and calyx hairy : stem four-sided.

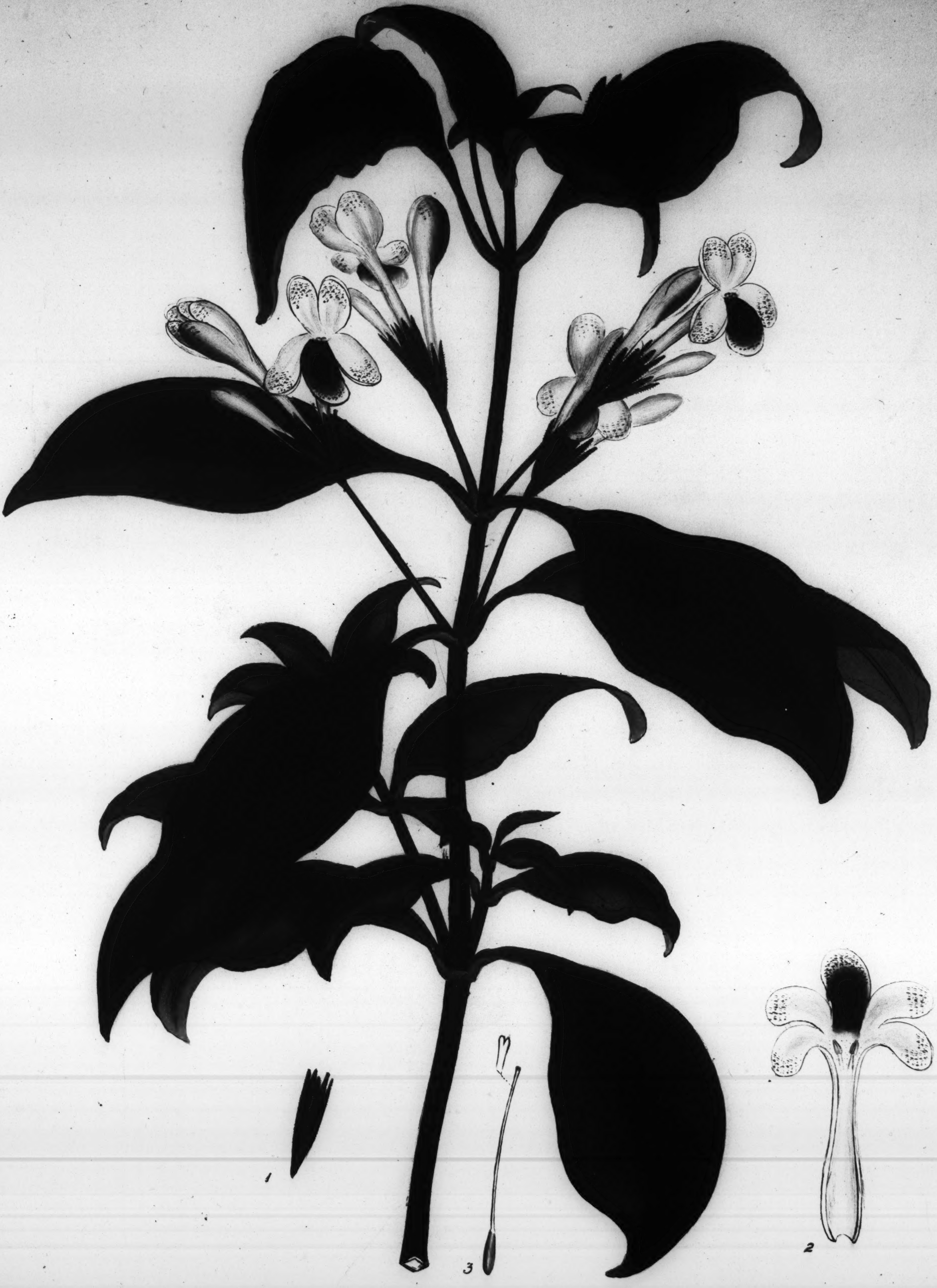
Native of Jamaica.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. Seed-bud and pointal, summit magnified.

This ornamental stove plant was raised from West India seed, by Mr. J. Milne, nurseryman at Fonthill, about the year 1807; and from a fine specimen communicated by him in June 1811 our figure was delineated.

It is a perfectly new species, and has not hitherto, we believe, been either figured or described.



Justicia, bicolor

PLATE DCXLIV.

LOBELIA SPECULUM.

Lobel's Venus's Looking-glass.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers simple.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-fidus. Corolla 1-petala, irregularis. Capsula infera, 2- seu 3-locularis.	**Cup** 5-cleft. Blossom 1-petalled, irregular. Capsule beneath, 2- or 3-celled.

SPECIFIC CHARACTER.

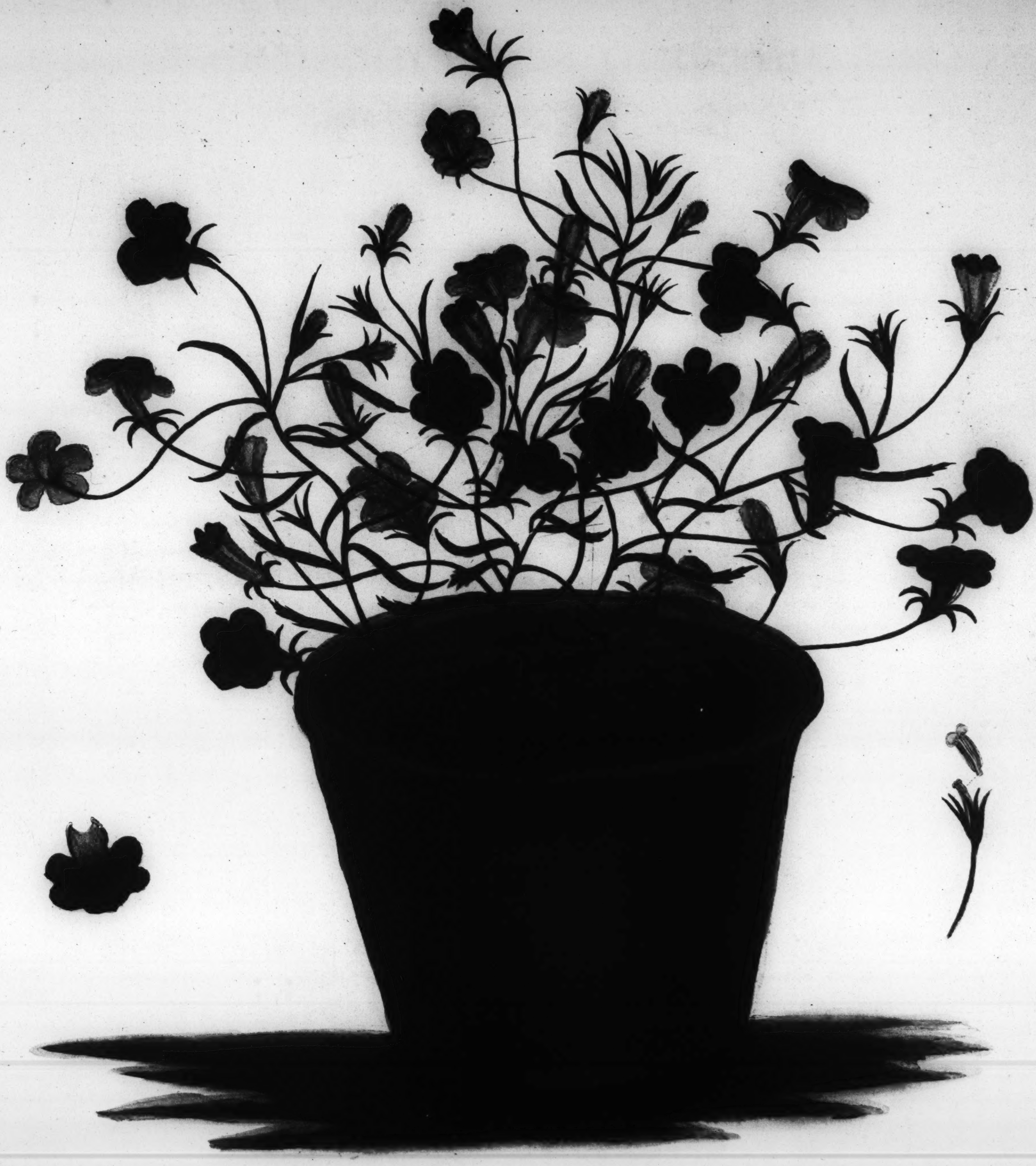
Lobelia foliis linearibus, integerrimis, superne acutis, ad basin dentatis, et ad apicem latioribus: corollis atro-purpureis, laciniis subequalibus: frutex pygmeus, ramulis numerosis tenuissimis patentibus.	**Lobelia** with linear leaves, entire, and pointed on the upper part of the plant, but toothed on the lower part, and broader at the end: Blossoms of a dark purple colour, with nearly equal segments. A dwarf shrub, with numerous slender spreading branches.

REFERENCE TO THE PLATE.

1. A blossom spread open.
2. The empalement, chives, and pointal, tips and summit magnified.

Of this perfectly new species of Lobelia we do not find either figure or description in any author ancient or modern. The resemblance it bears to the *Campanula Speculum*, or Bell-flowered Venus's Looking-glass, induced us to give it the same specific title. It is a delicate slender little annual, with an abundant succession of dark purple flowers, which appear to great advantage when the sun shines. In the regularity of its corolla it differs essentially from the genus Lobelia, and in a manuscript of the late Dr. Solander we find an intention to separate it by the generic title of *Speculare*.

Pl.652



Lobelia speculum

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PLATE DC~~LX~~V.

EPIDENDRUM FRAGRANS.

Sweet-scented Epidendrum.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointal. Two Chives.

ESSENTIAL GENERIC CHARACTER.

Nectarium turbinatum, obliquum, reflexum.	**Honey-cup** top-shaped, oblique, and reflexed. See Pl. XIII. Vol. I. Epidendrum cochleatum.

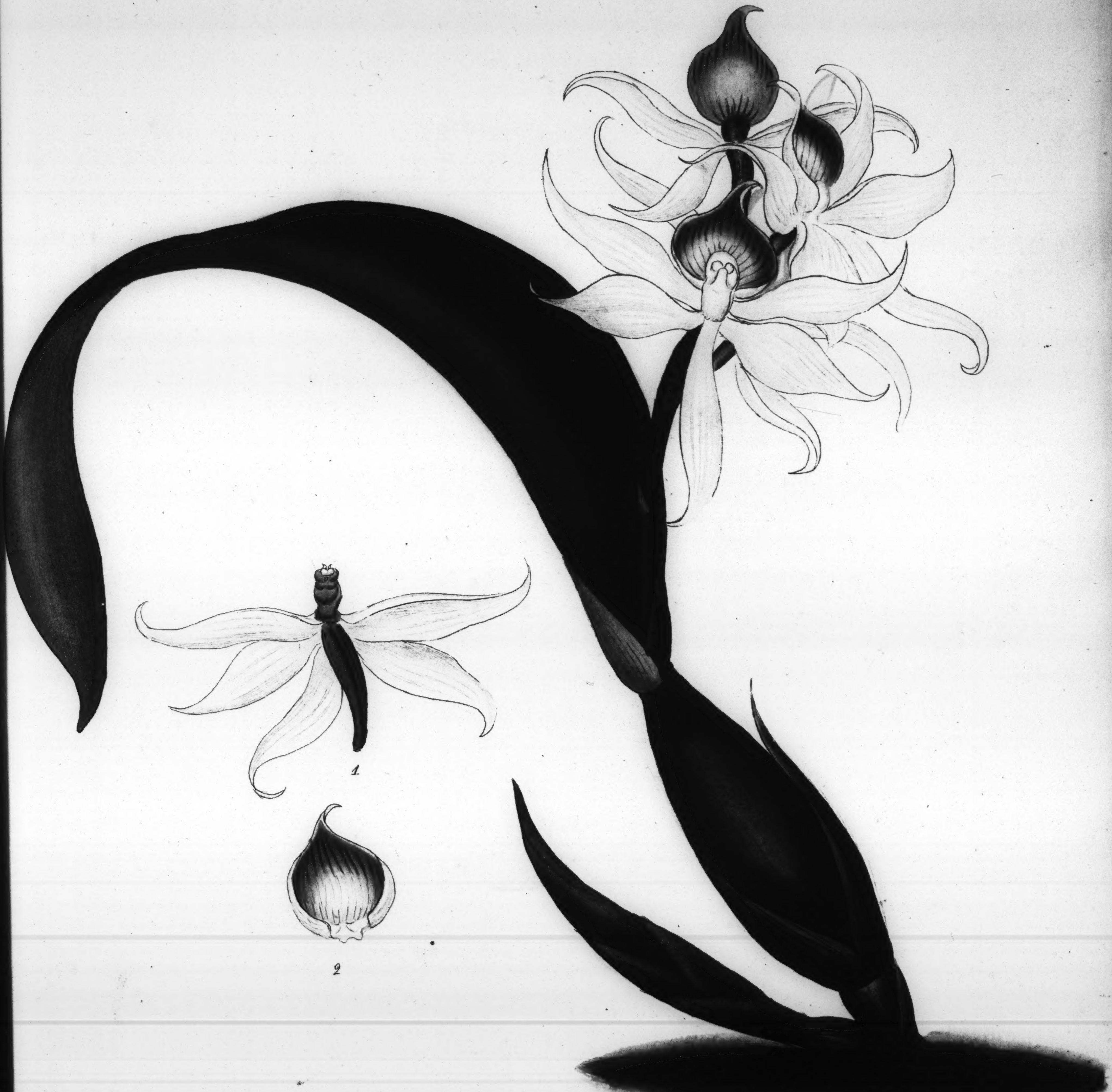
SPECIFIC CHARACTER.

Epidendrum folio lanceolato bulbo innato, scapo abbreviato multifloro, lamina labelli cordata acuta. *Wildenow's Sp. Pl.*	**Epidendrum** with a lance-shaped leaf upon the bulb, with a short stalk, many-flowered.

REFERENCE TO THE PLATE.

1. The empalement, chives, and pointal.
2. The honey-cup.

This species of Epidendrum is an old inhabitant of the hot-house, and much esteemed for the fragrance of its flowers, and the only one at present known to us (the angustifolium excepted) with a single leaf. It is enumerated in the Species Plantarum of Willdenow, as described by Swartz; but we do not find that any figure of it has before been published.



Epidendrum fragrans

PLATE DCXLVI.

PROTEA RADIATA.

Radiated Protea.

CLASS IV. ORDER I.

TETRANDRIA MONOGYNIA. Four Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 4-fida seu 4-petala. Antheræ lineares, petalis infra apices insertæ. Calyx proprius nullus. Semina solitaria.	**Blossom** four-cleft, or of four petals. Tips linear, inserted into the petals below the points. Cup proper none. Seeds solitary.

SPECIFIC CHARACTER.

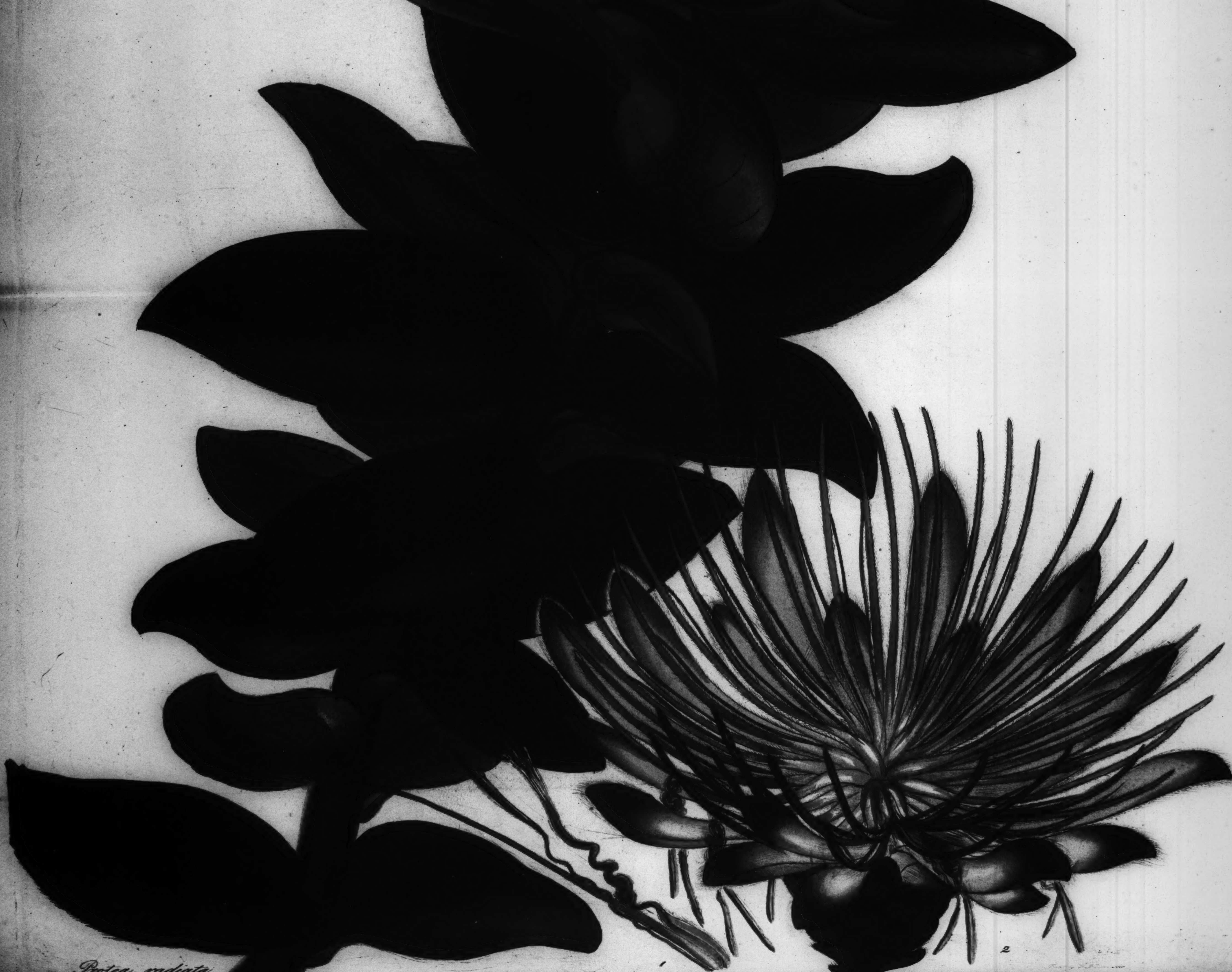
Protea foliis obtuse lanceolatis, obliquis, horizontaliter sitis: squamis calycinis spathulatis, rubris, tomentosis, marginibus pilosis: caule erecto, bipedali.	**Protea** with leaves obtusely lance-shaped, standing sideways in an horizontal direction: scales of the empalement spathula-shaped, red, and downy, with hairy margins. Stem upright, and about two feet high.

REFERENCE TO THE PLATE.

1. A flower complete.
2. The empalement and flowers of a green variety.

This Protea is nearest allied to the P. coronata published in the Seventh Volume of this Work, Pl. 469, but differs essentially from it (and also from every other species of Protea at present known to us) in having so few flowers, that the centre looks like an empty cup, the flowers being spread out towards the imbricated scales of the empalement in a circular manner; whence its specific title of radiata. In the bud state it does not promise that splendid appearance which it exhibits when expanded. Our figure represents a plant from the nursery of Mr. Knight, of the King's Road, Chelsea. At the base we have added the head of flowers of a green variety, communicated to us from the Hammersmith Nursery, raised from Cape seed, at the same time as the red, about the year 1809, and which flowered for the first time in this country last autumn (1811).

In our last Number we forgot to mention that the figure of the Lobelia Speculum was taken from a plant in the nursery of Messrs. Colville, and the Epidendrum fragrans from the collection of J. Vere, esq.



Protea. radiata

Pl 546

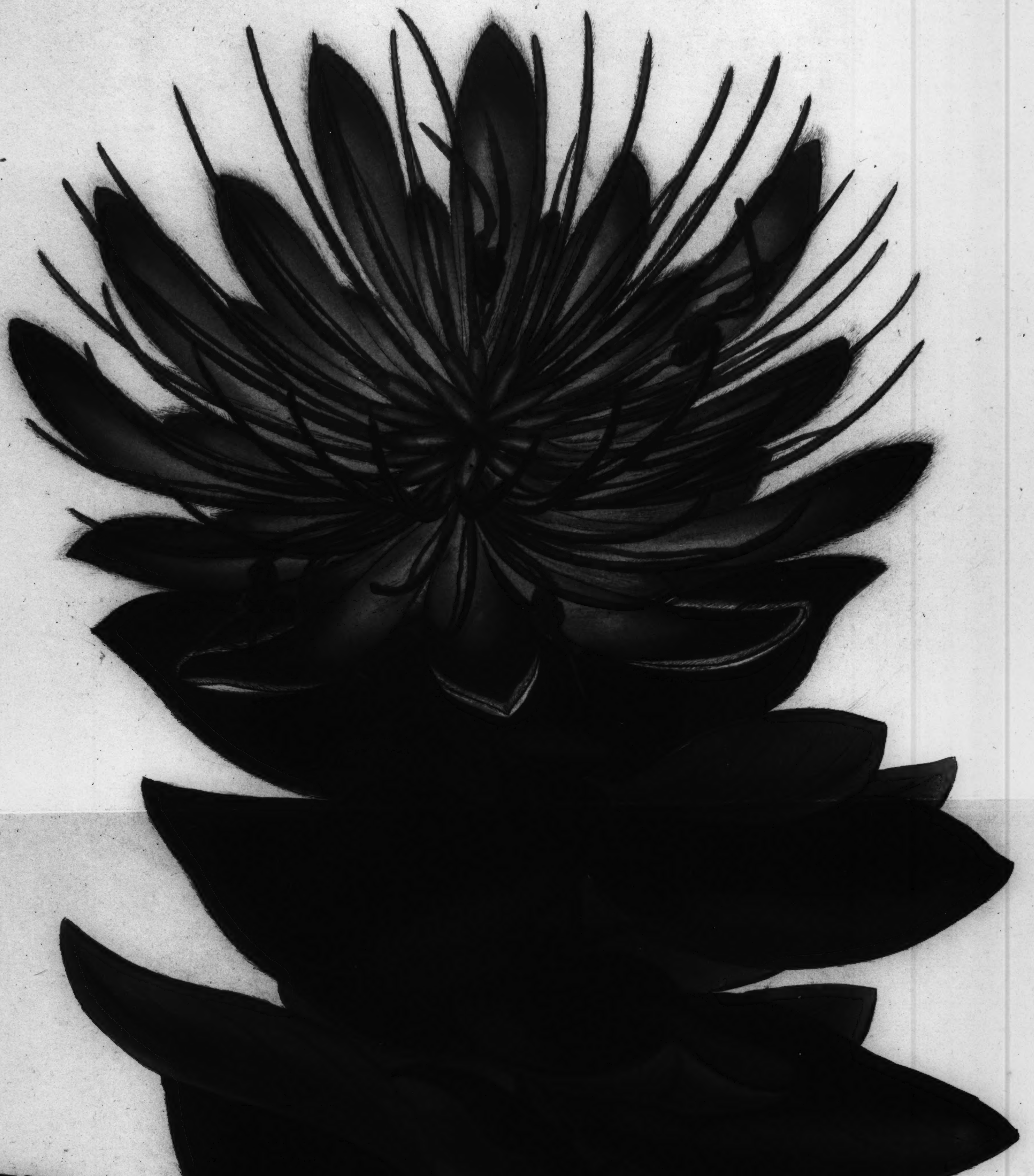


PLATE DCXLVII.

ANDROSACE CORONOPIFOLIA.

Buck's-horn Plantain-leaved Androsace.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Stamens. One Style.

GENERIC CHARACTER.

Involucrum umbellatum. Corolla hypocrateriformis, 5-loba, ore glanduloso. Capsula quinquevalvis.	**Umbel** with an involucre. Corolla salver-shaped, five-lobed, with glands at the mouth. Capsule with five valves.

SPECIFIC CHARACTER.

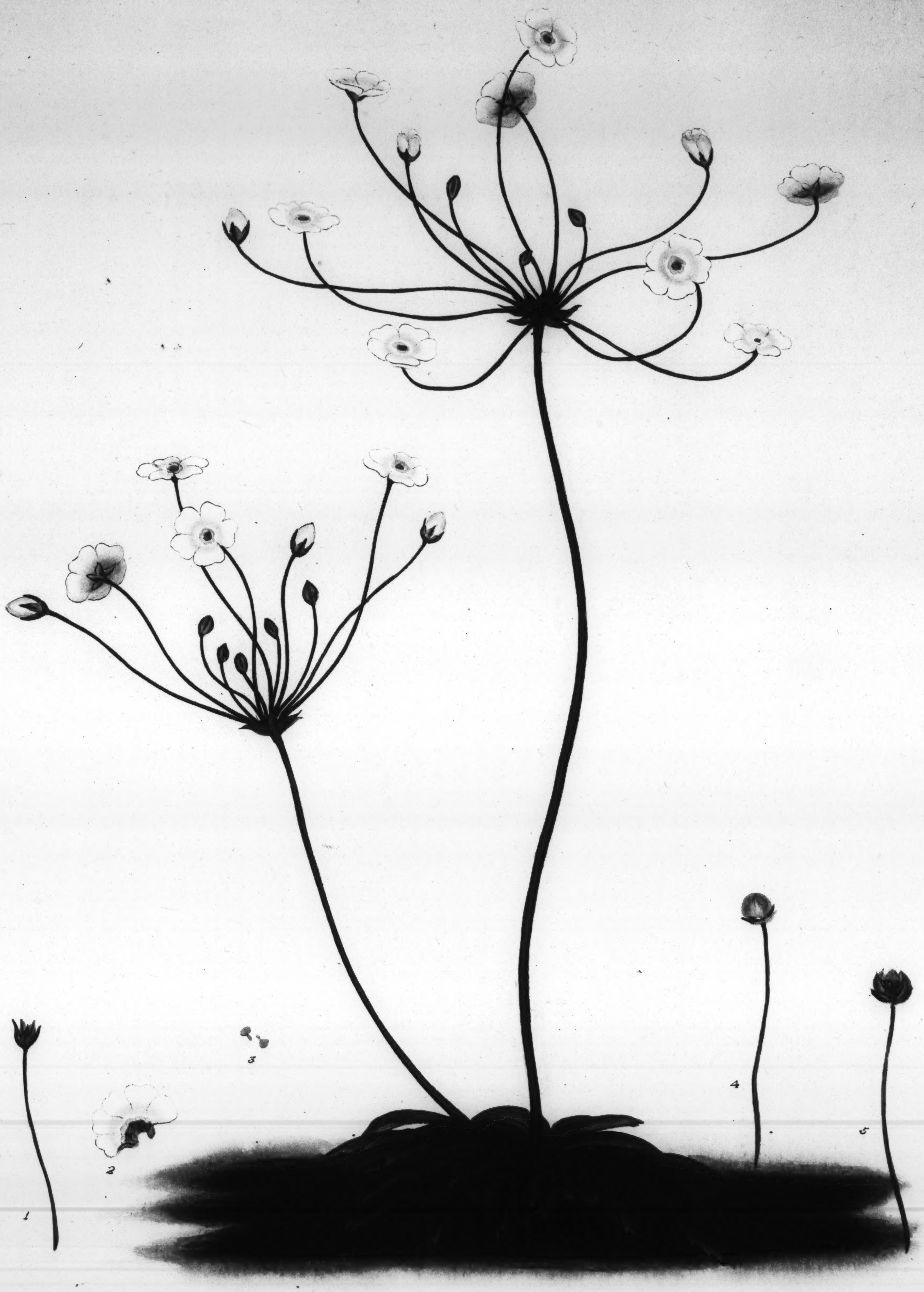
Androsace foliis lineari-lanceolatis dentatis, umbellæ radiis laxis sub-capillaribus numerosis, corollis calyce duplò longioribus.	**Androsace** with linear-lanced toothed leaves: the rays of the umbel hair-like, loose, very numerous, and the blossoms double the length of the calyx.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. Seed-bud and pointal, summit magnified.
4. A ripe seed-vessel.
5. The same opened to expose the seeds.

Our drawing of this elegant little plant was taken at the nursery of Messrs. Malcolm and Co., at Kensington, July 1811. No figure or description of the species has before been published; but we have seen wild specimens of it in the herbarium of A. B. Lambert, esq., gathered by the Swedish naturalist Laxman, near the Lake Baical in Siberia, and marked *Androsace angustifolia.* The height of the plants in cultivation with us varies from three to ten inches, the number of rays in the central umbel are from twelve to twenty, and in the lateral ones from six to fourteen; the plant is annual, and generally sows itself upon the borders where it grows. We are informed it was introduced about 1806, by Mr. Bell, of Sion Gate near Brentford, who received seeds of it from Siberia, under the name of *Androsace lactea.*

Pl. 64



Androsace coronopifolia

PLATE DCXLVIII.

CROTOLARIA SALTIANA.

Salt's Crotolaria.

CLASS XVII. ORDER IV.

DIADELPHIA DECANDRIA. Two Brotherhoods. Ten Chives.

ESSENTIAL GENERIC CHARACTER.

Legumen turgidum, inflatum, pedicellatum: filamenta connata, cum fissura dorsali.	**Pod** turgid, inflated, pedicelled. Chives conjoined, with a dorsal fissure.

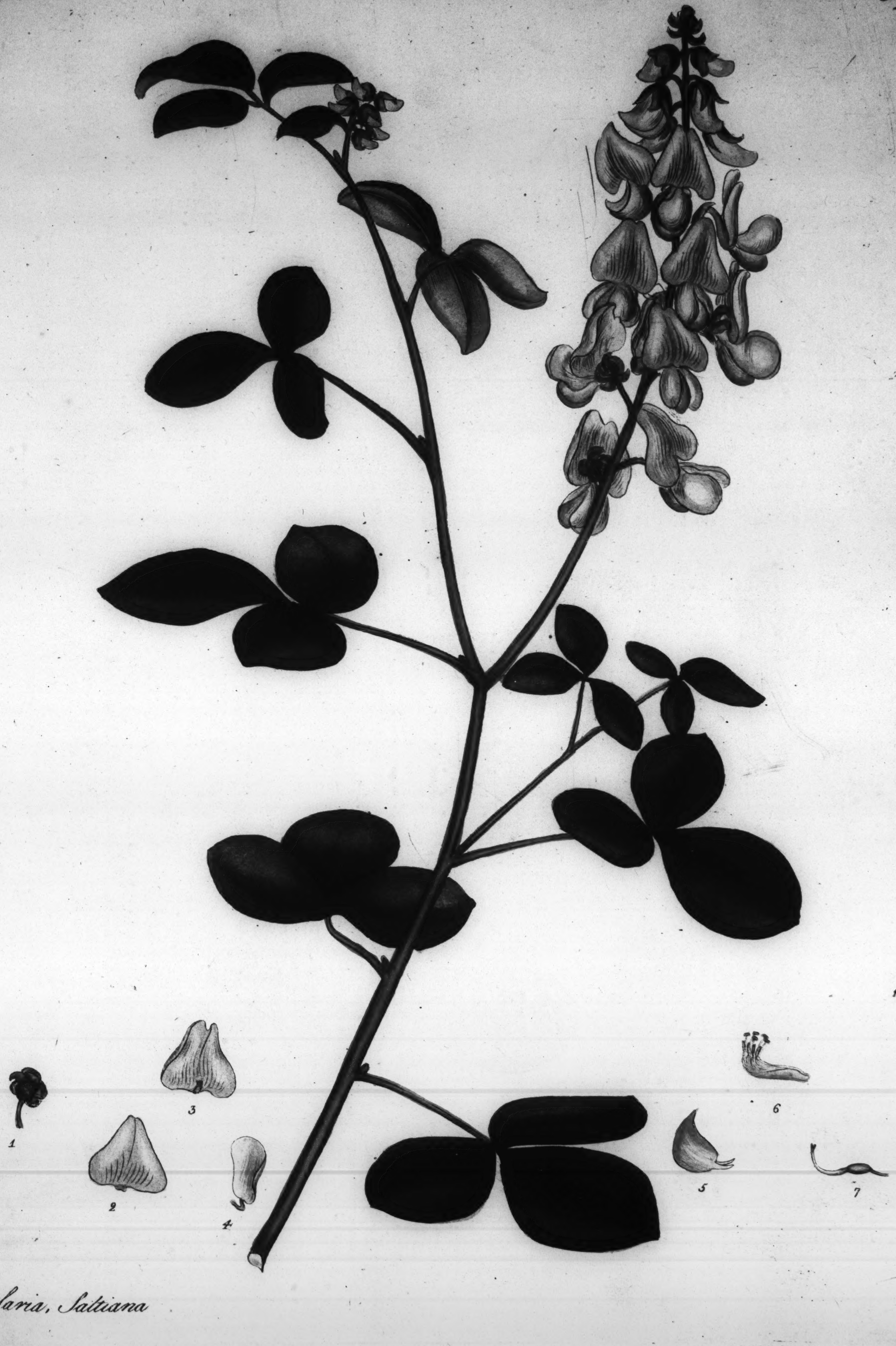
SPECIFIC CHARACTER.

Crotolaria frutescens, floribus spicatis: ramis teretibus, tomentosis: foliis ternatis: foliolis ovatis, tomentosis: petiolis uncialibus.	**Shrubby** Crotalaria. Flowers grow in spikes: branches are round and downy. Leaves ternate. Leaflets ovate and downy. Petioles an inch long.

REFERENCE TO THE PLATE.

1. The empalement.
2. The standard.
3. The under-side of the same.
4. One of the wings.
5. The keel.
6. The chives.
7. Seed-bud and pointal.

This nondescript species of Crotolaria was introduced by Mr. Salt last April (1811) from the distant region of Abyssinia. We have therefore named it after him, in compliment to that ardour, which in the pursuit of natural history has twice impelled him to undertake a journey to so remote a country. Our figure represents a fine specimen communicated to us by A. B. Lambert, esq., who raised it from seed in his hot-stove at Boyton, and where it flowered last summer (1811) for the first time in this country.



Crotolaria, Saltiana

PLATE DCXLIX.

ALSTROMERIA EDULIS.

Eatable Alstromeria.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

GENERIC CHARACTER.

Corolla 6-petala, sub-bilabiata: petalis 2 inferioribus basi-tubulosis. Stamina declinata.

Blossom 6-petalled, nearly bilabiate: two of the lower petals are tubular at the base. Stamens standing sideways.

SPECIFIC CHARACTER.

Alstromeria foliis alternis, ellipticis, lanceolatis, acuminatis, glabris: floribus terminalibus, cernuis, pedunculis longis. Caulis volubilis. Radices tuberosæ, globosæ.

Alstromeria with alternate elliptic leaves, lance-shaped, pointed, and smooth: flowers terminate the branches upon long footstalks, nodding. Stem twining. Roots tuberous and round.

REFERENCE TO THE PLATE.

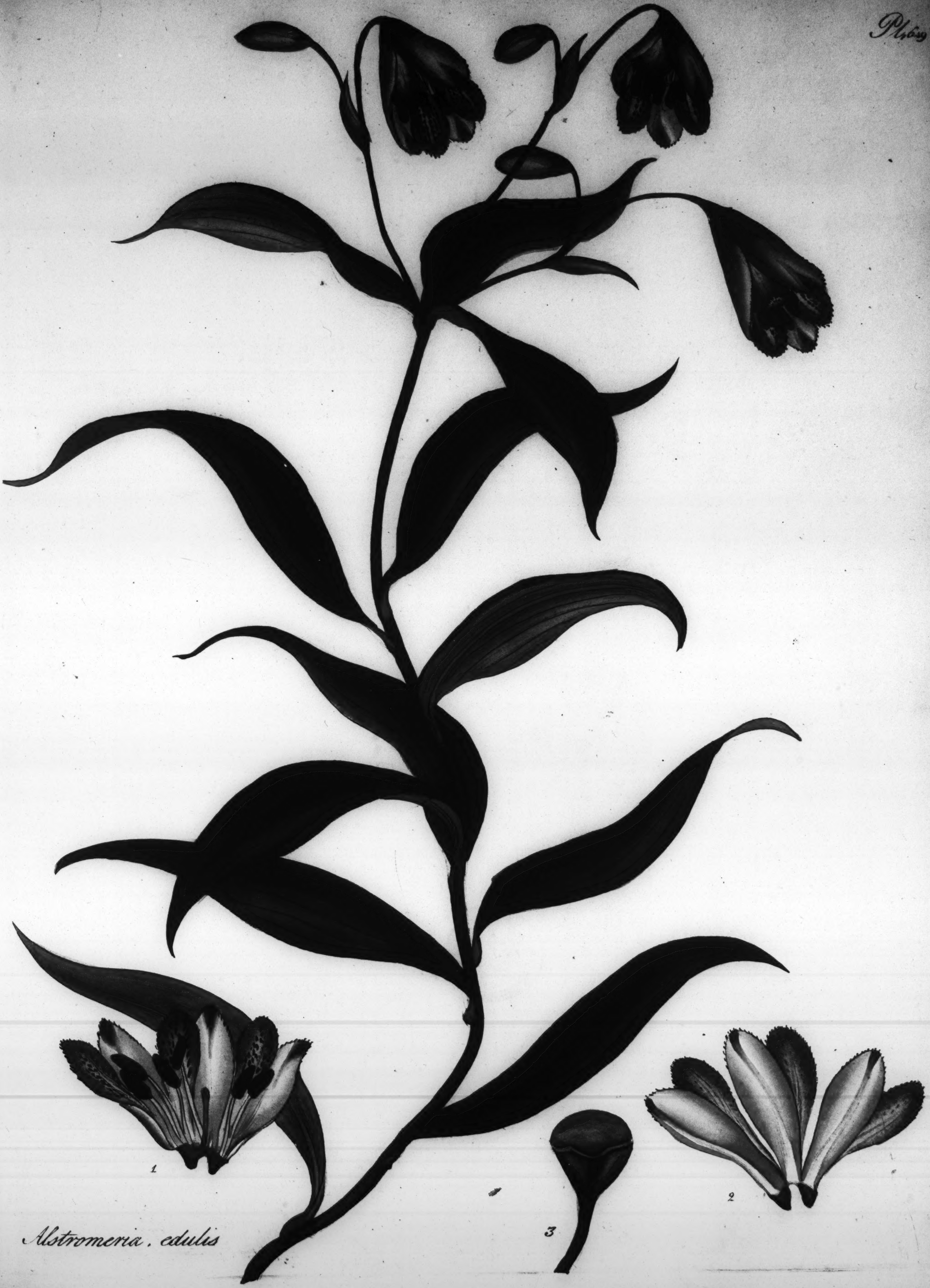
1. A flower spread open.
2. The same shown from the outer side.
3. A half ripe seed-vessel.

This elegant plant was introduced to this country by T. Evans, Esq., who received it in 1801 from the late Dr. Anderson, of the Botanic Garden in the Island of St. Vincent, and which flowered for the first time in the hot-house of the Countess de Vandes at Bayswater last autumn (1811).

The only figure of it extant is a good coloured one recently published in the Flore des Antilles, by F. R. Tussac, a colonist of Saint Domingo; who describes it as being eagerly sought after by the Negroes, not for the beauty of its flowers, but for the sake of the roots, which not only serve them for food, but for an article of commerce, which they take with them when they travel to the Cape of Good Hope, and sell under the title of white Jerusalem artichokes.

This species very much resembles the A. Salsilla. The principal and almost only distinction is, that the roots of the Salsilla are long and ligneous, while those of the edulis are round and succulent, about the size of young potatoes, and when boiled are said to be a light and delicate food. A farinaceous or mealy substance is also made of them, from which cream is made, wholesome and very agreeable to the taste.—All the species which compose this fine genus are to be found in the superb gardens of the Incas of Peru, where it is indigenous.

Pl. 169



Alstromeria. edulis

PLATE DCL.

XERANTHEMUM FASCICULATUM, *var. flore rubro.*

Bundled-leaved Everlasting Flower; red-flowered variety.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

Receptaculum paleaceum. Pappus setaceus. Calyx imbricatus, radiatus; radio colorato.	**Receptacle** chaffy. Feather bristly. Cup tiled, rayed; the ray coloured.

See *Xeranthemum speciosissimum*, Pl. LI. Vol. I.

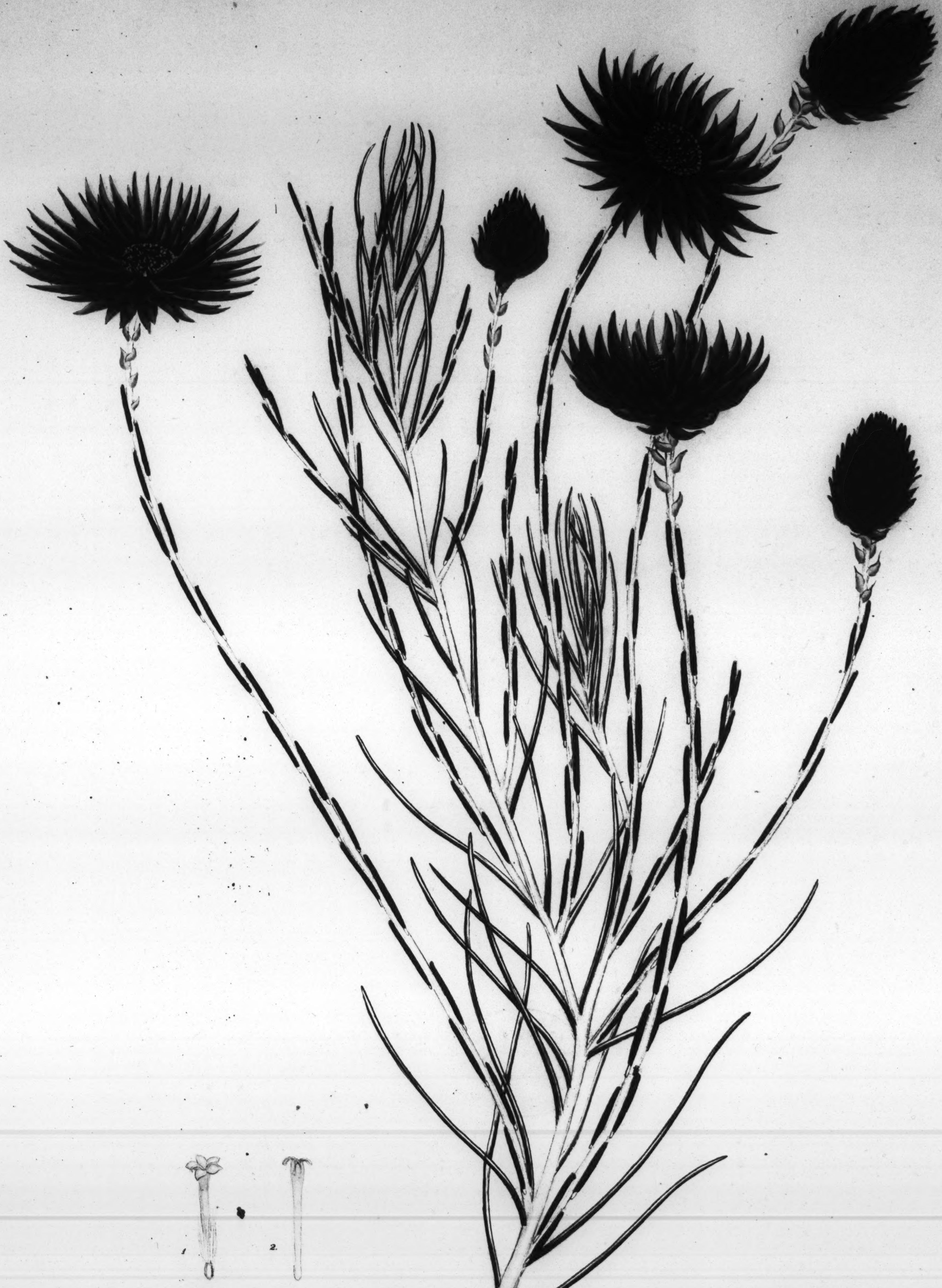
SPECIFIC CHARACTER.

Xeranthemum foliis caulinis linearibus, fasciculatis, longissimis: floribus solitariis; squamis calycinis lanceolatis, rubris.	**Everlasting Flower** with the stem-leaves linear, roundish, bundled, and very long. Flowers solitary; the scales of the cup lance-shaped and red.

REFERENCE TO THE PLATE.

1. An hermaphrodite floret with its seed magnified.
2. Seed-bud, chives, and pointal, magnified.

This Xeranthemum was raised from seed brought over from the Cape of Good Hope by Mr. Niven in 1809, and resembles in its habit and foliage the X. fasciculata figured in the Fourth Volume of this Work, Plates 242 and 279, but is much more esteemed than either of them for the brilliance of its fine red flowers. It requires no other treatment than what is common to most of the genus, and continues in flower from May till October.



Xeranthemum, fasciculatum. Var. flore rubro

PLATE DCLI.

CYMBIDIUM ANDERSONII.

Anderson's Cymbidium.

CLASS XX. ORDER I.

GYNANDRIA DIANDRIA. Chives on the Pointals. Two Chives.

ESSENTIAL GENERIC CHARACTER.

Corolla 4–5-petala, erecta vel patens, labello basi concavo. Anthera opercularis, decidua.	**Blossom** 4–5-petalled, upright or spreading, with a nectary concave at the base. Tips covered, deciduous.

SPECIFIC CHARACTER.

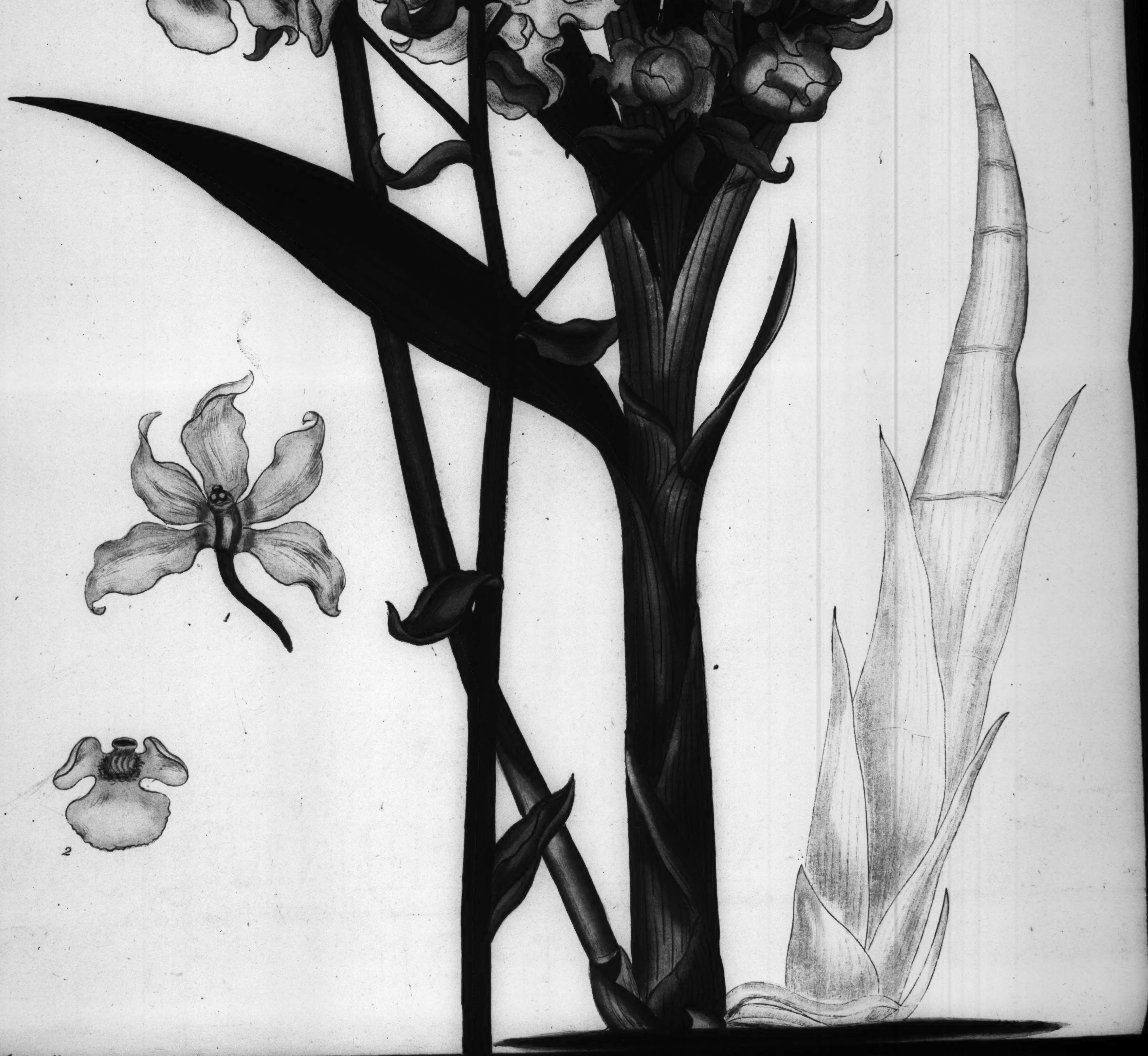
Cymbidium caule elato: foliis vaginatis, lanceolatis, costatis: floribus in spicis longis ramosis: corollis flavis.	**Cymbidium** with a tall stem: leaves sheathed, lance-shaped, and ribbed. Flowers grow in long branched spikes: blossoms yellow.

REFERENCE TO THE PLATE.

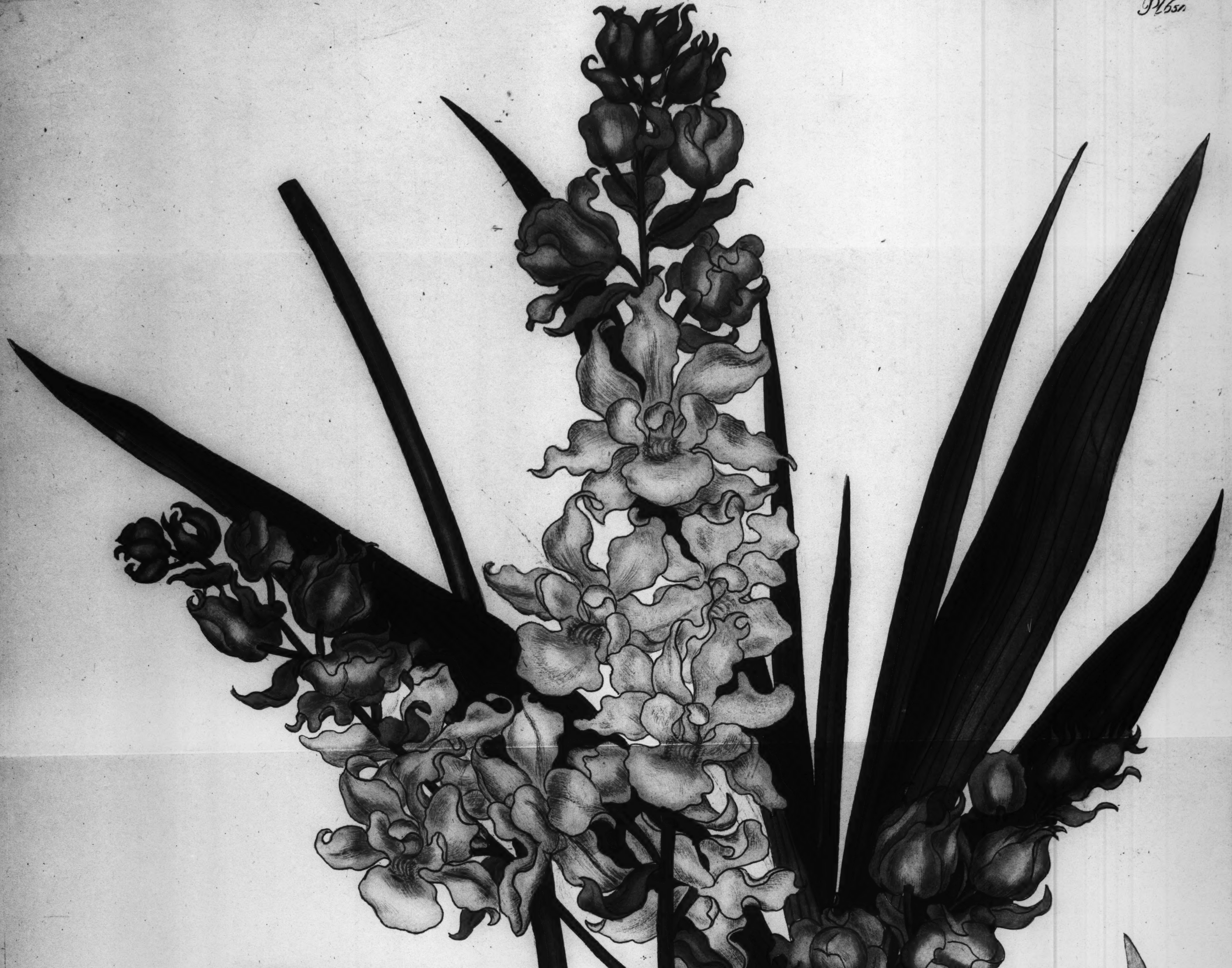
1. A flower without the nectarium.
2. The nectarium.

Our figure represents a nondescript species of Cymbidium communicated to us by T. Evans, Esq., in whose collection at Stepney it flowered last summer (1811) for the first time in this country. We have given it the specific title of *Andersonii*, as a tribute of respect to the late Dr. Anderson, by whom it was introduced in 1804, with many other fine new plants, from the botanic garden in the island of St. Vincent, and may be considered as a valuable addition to the hot stove, from its great height and numerous large yellow blossoms.

⁂ In the description of the Alstromeria edulis of our last Number, Cape of Good Hope is inserted instead of Cape Francois, a mistake occasioned by our writing it off in a hurry along with some pages of the Erica, a tribe of plants (with few exceptions) all natives of the Cape of Good Hope. We detected the error as soon as printed, but did not think it of sufficient consequence to cancel the page and prolong its publication, as it had already been too long delayed; and should have only noticed it in the Errata at the end of the Volume, (which is nearly terminated,) were it not for the partial criticism in the Monthly Magazine given by an interested friend to the Botanical Magazine, who probably imagines the sale of our work is detrimental to that publication, and reminds us of the story of the man with a very short nose, who was always railing at the long nose of another person; which led to the conclusion that he thought it was made at the expense of his short one. But as our readers may think these observations long enough, they will doubtless think those of the botanical report still more so, as in the comments on the Protea radiata, fifteen lines are nearly filled with technical phrases, in an ineffectual attempt to explain the meaning of two botanical terms which he allows to be differently accepted by different authors, and at last leaves off just where he began. But meeting with a better opportunity in Alstromeria edulis, he has not only made the most of that, but rather more than enough of it, verifying the old adage, that those who can make something of nothing will make a little go a great way.



Cymbidium Andersonii.



Pl 650

PLATE DCLII.

XERANTHEMUM HUMILE.

Low-growing Xeranthemum.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

Receptaculum paleaceum, Pappus setaceus. Calyx imbricatus, radiatus, radio colorato.	**Receptacle** chaffy. Feather bristly. Cup tiled, rayed, the ray coloured.

See *Xeranthemum speciosissimum*, Pl. LI. Vol. I.

SPECIFIC CHARACTER.

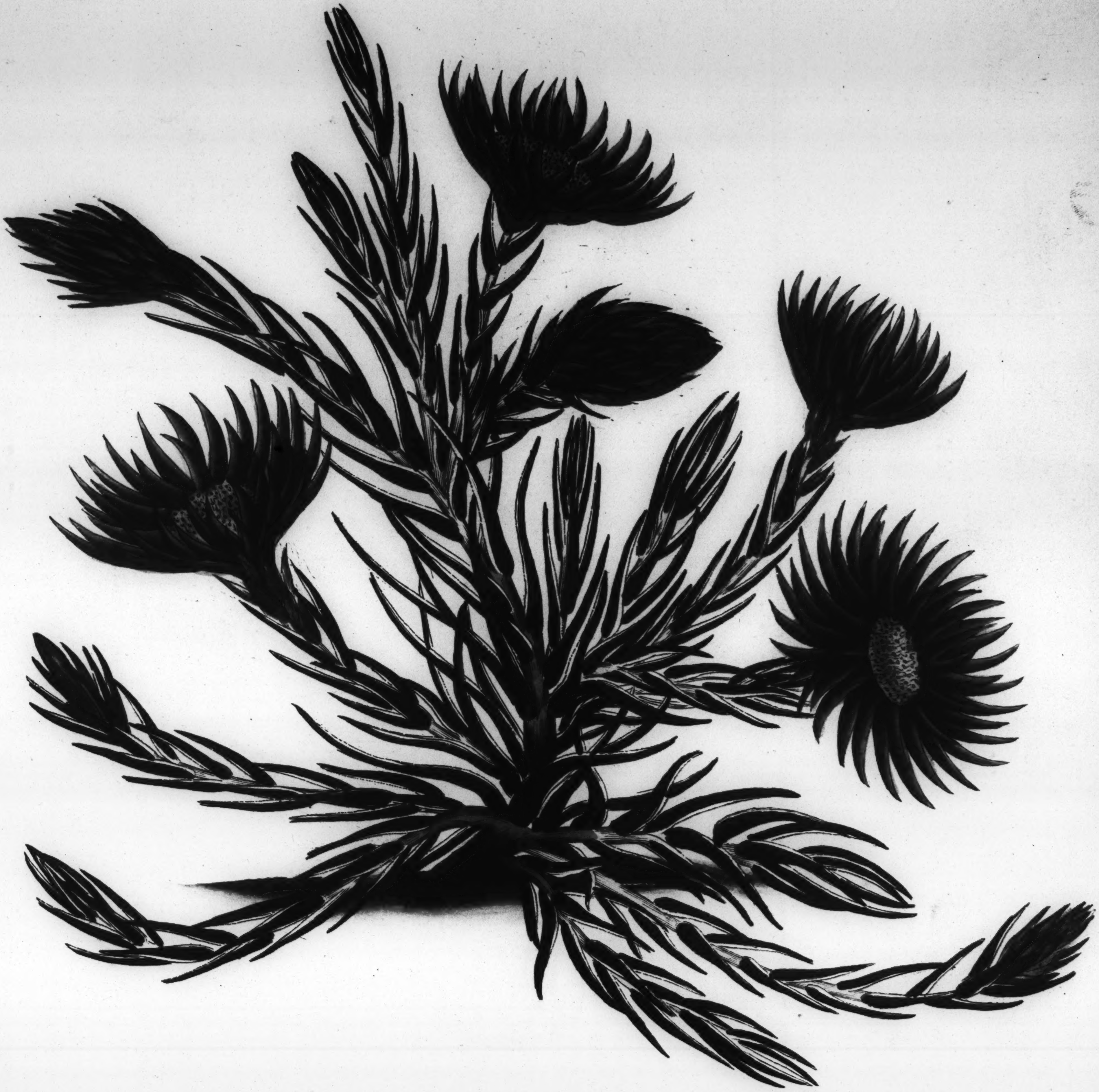
Xeranthemum foliis subulatis sub-vestitum. Caulis humilis, robustus, ramulis procumbentibus: floribus magnis rubris.	**Xeranthemum** with awl-shaped leaves nearly clothing the stem. Stem low and stout, with branches hanging down. Flowers large, and of a red colour.

REFERENCE TO THE PLATE.

1. An hermaphrodite floret with its seed magnified.

This fine dwarf species of Xeranthemum was introduced from the Cape of Good Hope at the same time with the X. fasciculatum rubrum by Mr. Niven. It is a hardy robust green-house shrub, of humble growth, and appears as if it would always retain that character. It requires an airy situation, and when watered (which should not be often) to be thoroughly wetted, as partial watering is a general destroyer of plants, by suffering the atmosphere to exhale the humidity before it has half penetrated to the bottom; which by repeated wetting rots the upper part, and leaves the roots below to starve for want of moisture.

Pl. 652



Xeranthemum. humilis

PLATE DCLIII.

CORRÆA SPECIOSA.

Showy Corræa.

CLASS VIII. ORDER I.

OCTANDRIA MONOGYNIA. Eight Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx monophyllus, quadri-dentatus. Corolla 4-petala. Stamina octo. Germen superum. Capsula quadrilocularis. Semina quatuor.	**Empalement** one-leafed, four-toothed. Blossom four-petalled. Eight chives. Seed-bud above. Capsule four cells. Seeds four.

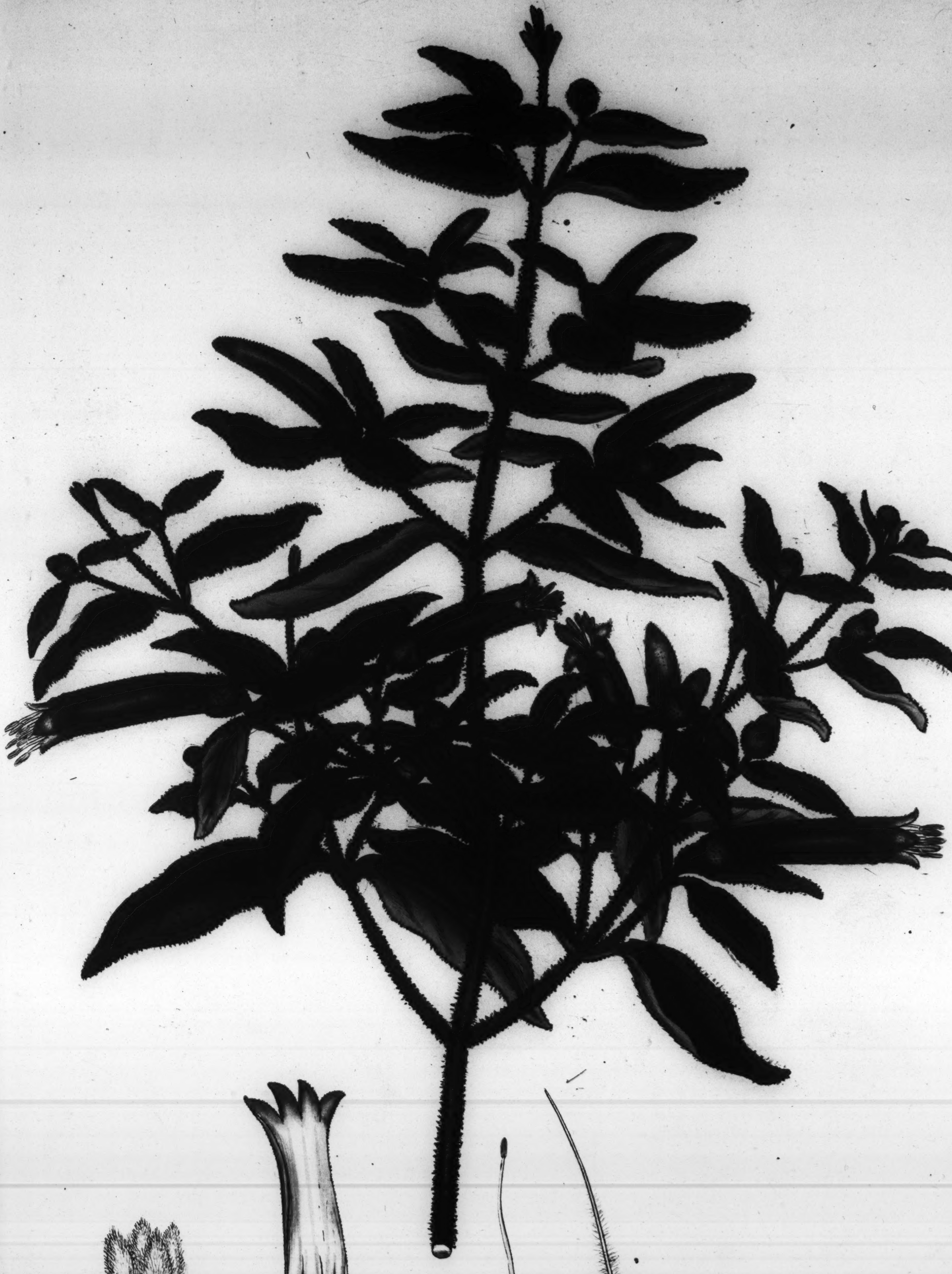
SPECIFIC CHARACTER.

Corræa foliis oblongis, oppositis, undulatis, hirsutis, supra viridibus, subtus tomentosis, ferrugineis: ramulis oppositis, alternis, ferrugineis, scabre pilosis: corollis bicoloribus, scabris.	**Corræa** with oblong opposite leaves, waved, and harshly haired, green on the upper surface and downy and rusty beneath. Branches opposite, alternate, rusty, and roughly haired. Blossoms two-coloured, and rough.

REFERENCE TO THE PLATE.

1. A blossom spread open.
2. One of the chives.
3. Empalement, seed-bud, and pointal.
4. Seed-bud magnified.

This elegant species of Corræa, a native of New Holland, is enumerated in Donn's catalogue by the specific title of speciosa, but has been overlooked in the new edition of the Hortus Kewensis. It is a hardy green-house plant with brilliant flowers in great succession, and may be propagated by cuttings. It requires an airy situation, and must not be too often watered. Our figure represents one half of a fine plant in the collection of Messrs. Colvilles.



Corræa. speciosa

PLATE DCLIV.

GNAPHALIUM EXIMIUM.

Showy Gnaphalium.

CLASS XIX. ORDER II.

SYNGENESIA POLYGAMIA SUPERFLUA. Tips united. Superfluous Pointals.

ESSENTIAL GENERIC CHARACTER.

Receptaculum nudum. Pappus pilosus vel plumosus. Calyx imbricatus, radiatus, radio colorato.	**Receptacle** naked. Down hairy or feathery. Empalement imbricated, rayed, with the ray coloured.

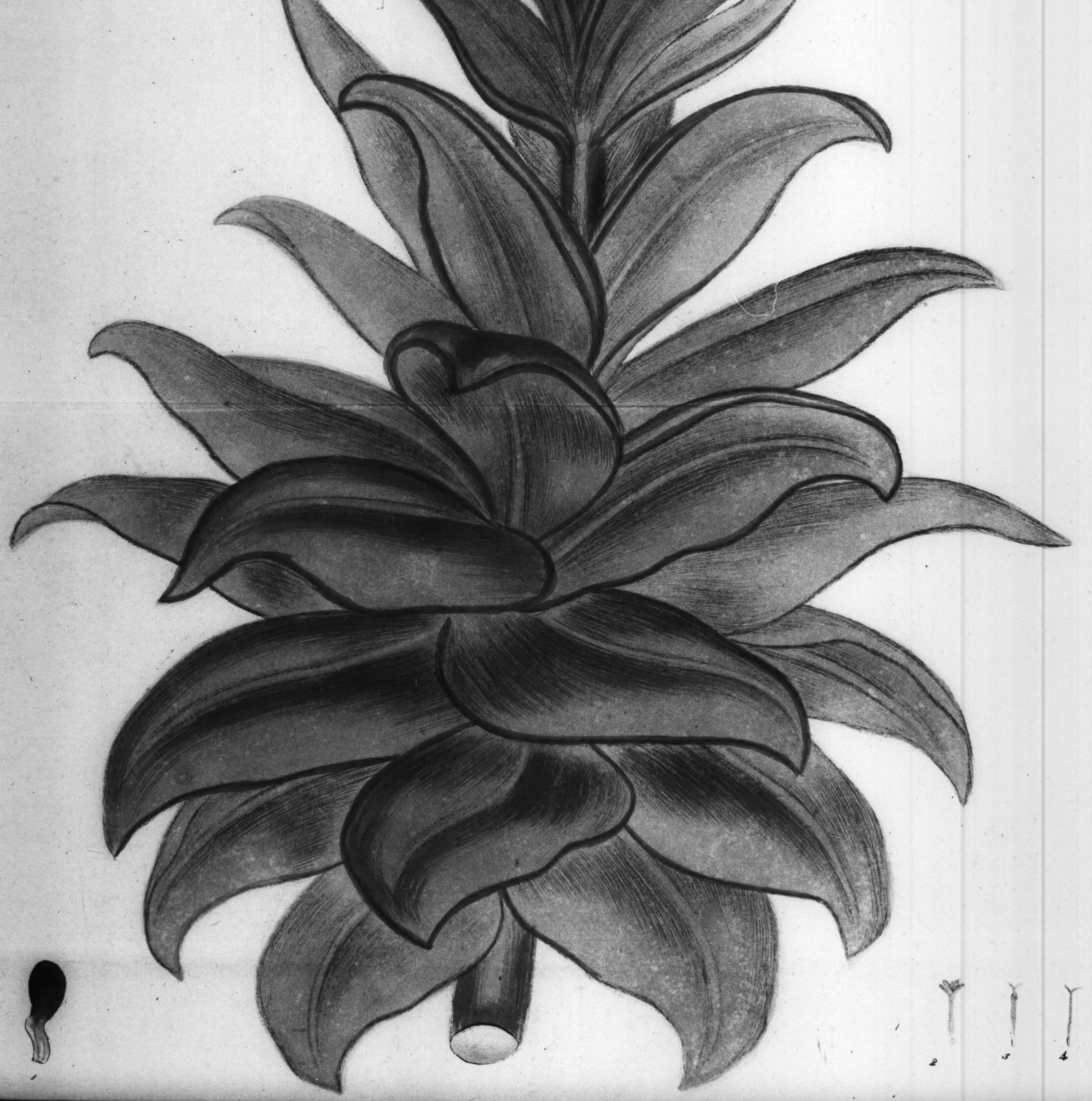
SPECIFIC CHARACTER.

Gnaphalium foliis sessilibus, ovatis, confertis, erecto-patentibus, lanatis: floribus terminalibus, paniculatis.	**Gnaphalium** with sessile ovate leaves crowded together, erect, spreading, and woolly: flowers paniculated and terminal.

REFERENCE TO THE PLATE.

1. One of the scales of the empalement.
2. A floret.
3. The chives and pointal.
4. Seed-bud and pointal.

This magnificent species of Gnaphalium was introduced to the British gardens from the Cape of Good Hope by Capt. W. Paterson in 1794, and is said to be found in a wild state on the borders of the Caffre country 500 miles from the Cape. It flowers in perfection during the months of July and August, and when in the bud state much resembles a rich ripe fruit, with leaves like flannel. The only figure we have seen of it is a small one given in the Botanical Magazine many years ago, before it was well naturalized, and on that account better adapted to the scale of their work. Our figure was taken from the Clapham collection when in its greatest splendour, and where several fine plants of it flowered with a luxuriance fully equal to what we have represented. It should be kept in an airy part of the greenhouse; and when watered, care should be taken not to wet the leaves, as that frequently destroys the plant.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654

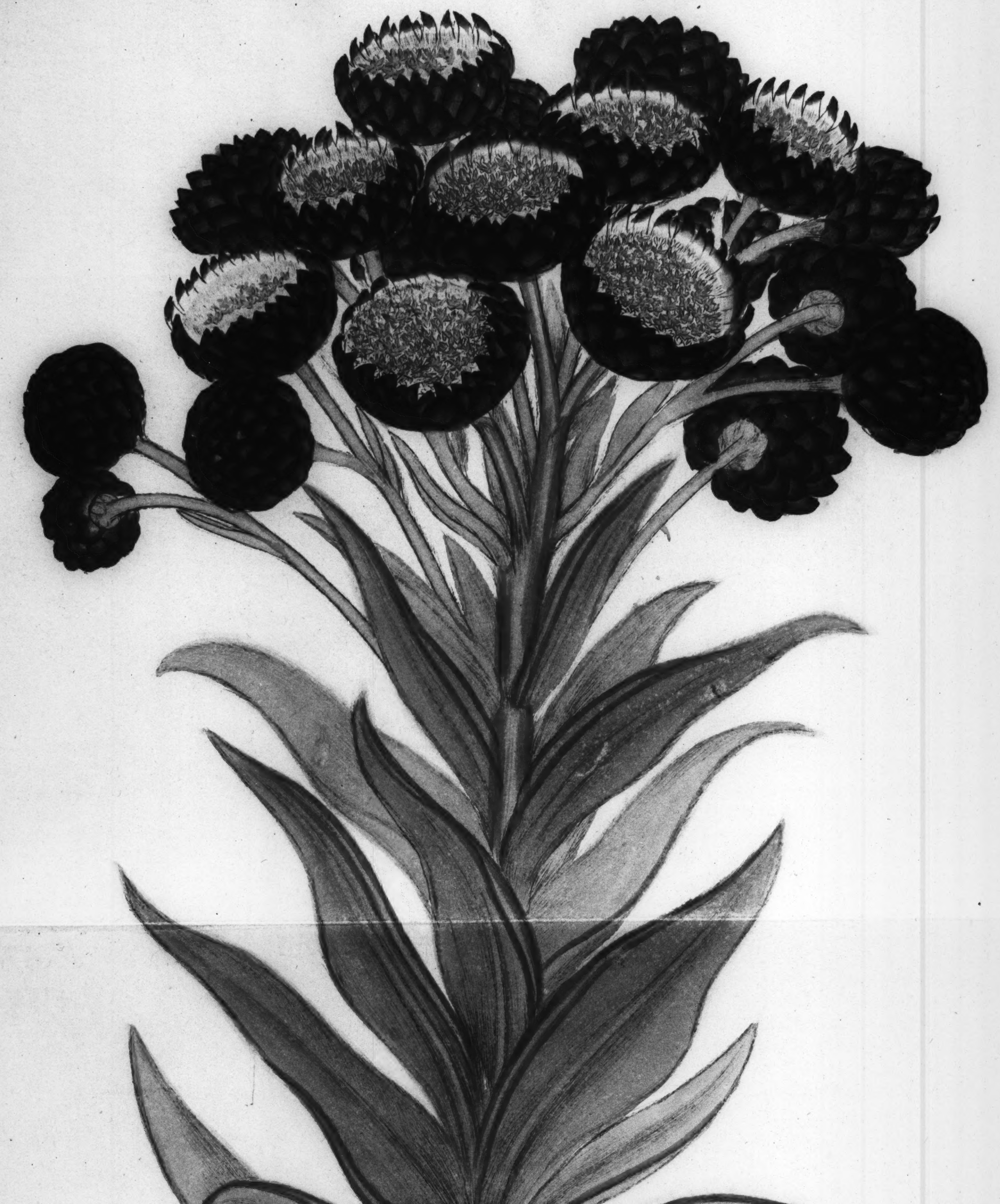


PLATE DCLV.

CERBERA MANGHAS.

Poisonous-fruited Cerbera.

CLASS V. ORDER I.

PENTANDRIA MONOGYNIA. Five Stamens. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Flores contorti. Corolla infundibuliformis, pulposa. Drupa monosperma.	**Flowers** contorted. Blossom funnel-shaped, pulpy. Seed-vessel one-seeded.

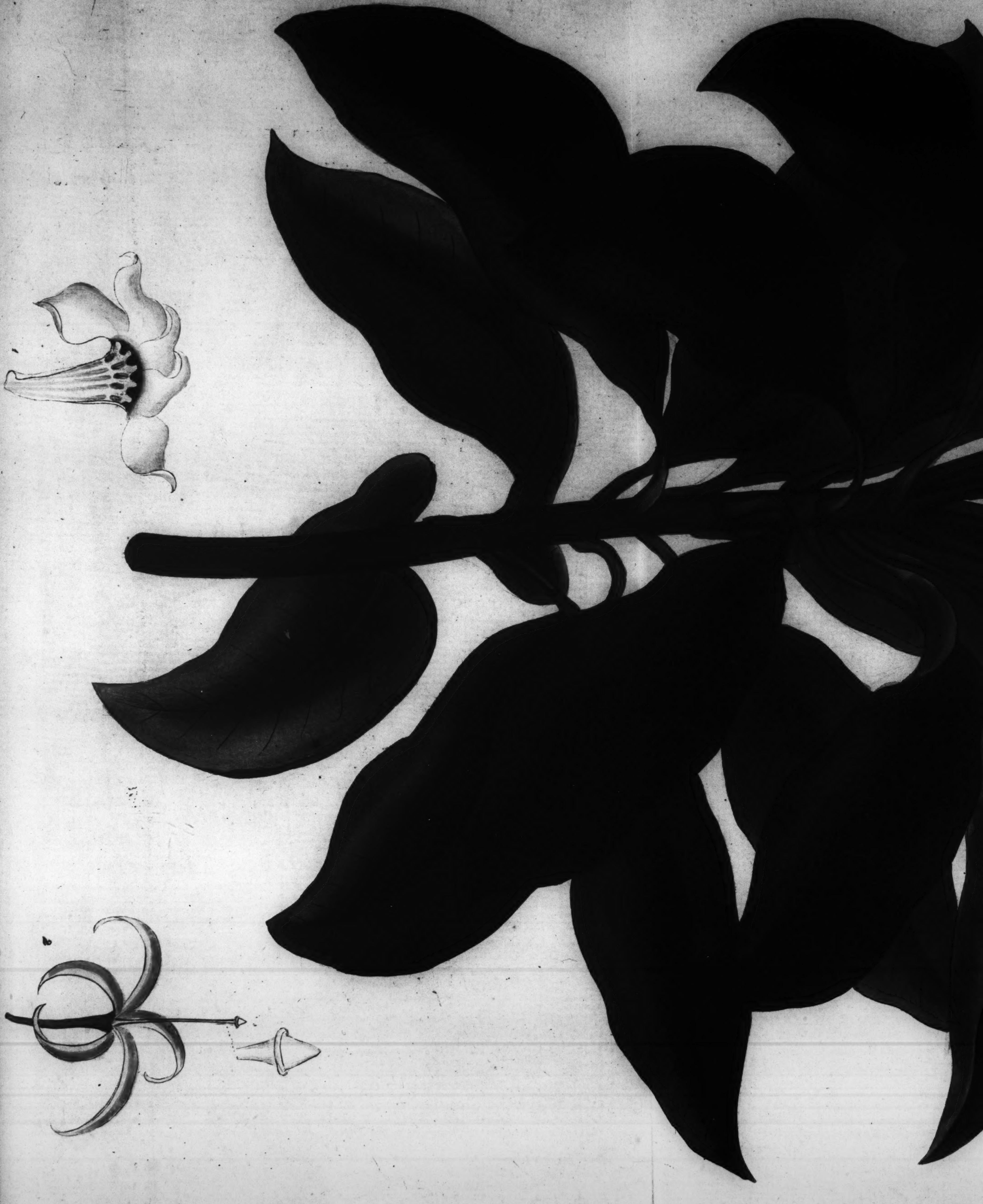
SPECIFIC CHARACTER.

Cerbera foliis alternis, lato-lanceolatis, glabris: ramis floriferis terminalibus: corolla alba, infundibuliformi: perianthio 5-phyllo: foliolis lanceolatis, deciduis: fructu persistente.	**Cerbera** with leaves alternate, broadly lance-shaped, and smooth: flower-branches terminal: blossoms white and funnel-shaped: empalement 5-leaved: leaflets lance-shaped and deciduous: fruit persistent.

REFERENCE TO THE PLATE.

1. A blossom spread open.
2. Empalement, summit magnified.

Our drawing represents a new species of Cerbera introduced from Pulo-Pinang in 1809, and which flowered late in the autumn of 1812, for the first time in this country, in the hot stove of T. Evans, Esq. whose collector informs us that it grows in abundance by the sea-side, and is a handsome shrub about three feet high. By the natives it is called Devil's flower, a title they apply indiscriminately to all noxious plants. But although it is considered as poisonous (as are all the Cerberas at present known) the natives of Amboyna are said by Rumphius to use it medicinally as a purgative, but that it is too powerful to be taken with safety by strangers. In Macassar an oil is expressed from the fruit, which is burnt in lamps, and emits a disagreeable smell. It bears a variety of names. By the Dutch it is called Milk-hout; in Portugal and Malay, Manga Brava; at Amboyna, Wabba; in Macassar, Lambuto Baleyice, Bintaro and Sassura Utan, and by some Caju Mattu, Buta or Blinthout. There are three uncoloured figures of it; one in Burmann's Zeylanica, page 150, tab. 70, figure 1; another in Rumphius's Amboynensis, vol. ii. page 243, figure 81; and in Rheede's Hortus Malabaricus, page 71, tab. 3. there is a representation of it by the title of Odallam; and, although a rough draft, it is certainly not the worst figure of the plant.



Pl. 655:

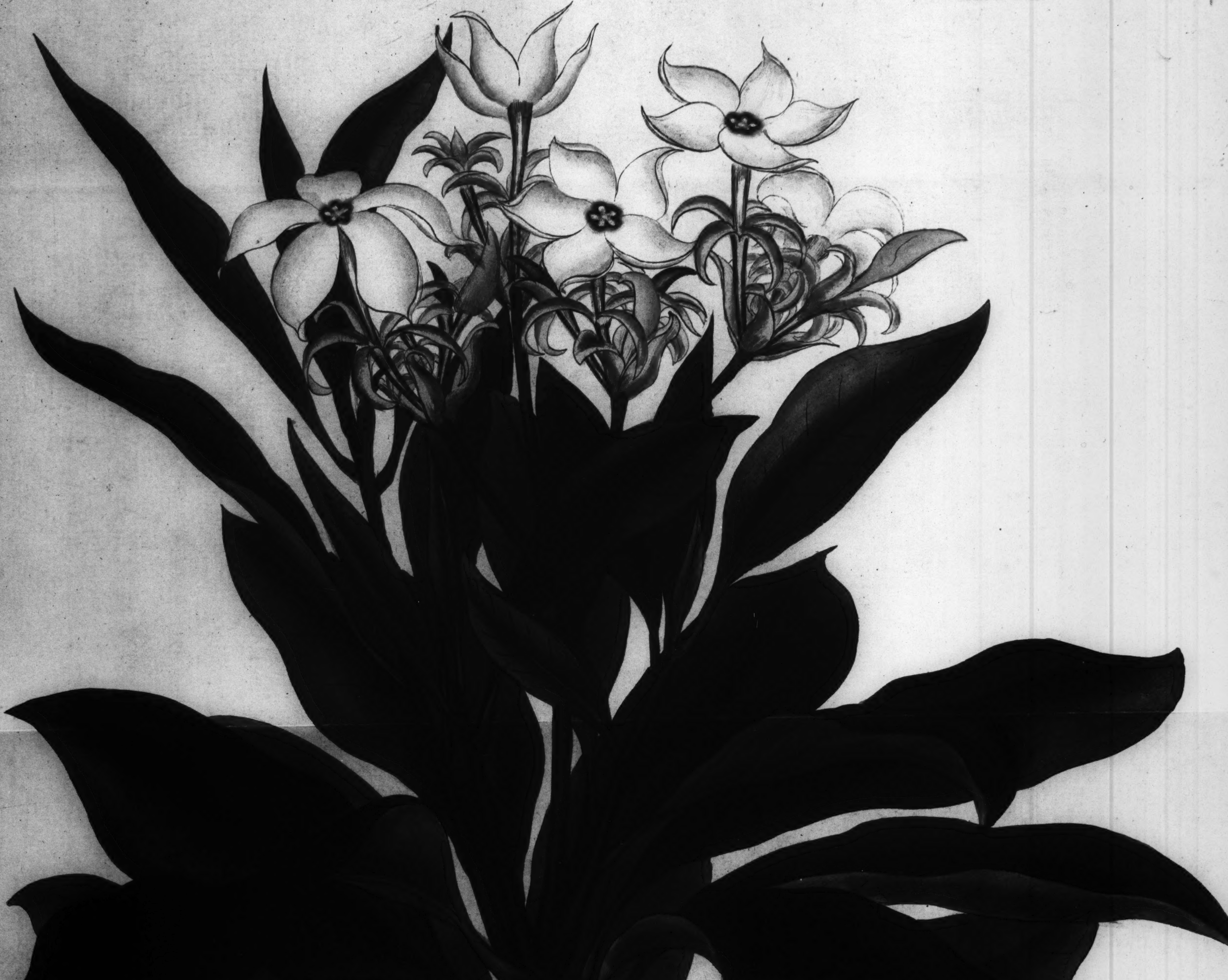


PLATE DCLVI.

CRASSULA PERFOLIATA.

Perfoliate-leaved Crassula.

CLASS V. ORDER V.

PENTANDRIA PENTAGYNIA. Five Chives. Five Pointals.

ESSENTIAL GENERIC CHARACTER.

Calyx pentaphyllus. Petala quinque. Squamæ quinque nectariferæ ad basin germinis.	**Empalement** five-leaved. Petals five. Five honey-bearing pores at the base of the germ.

SPECIFIC CHARACTER.

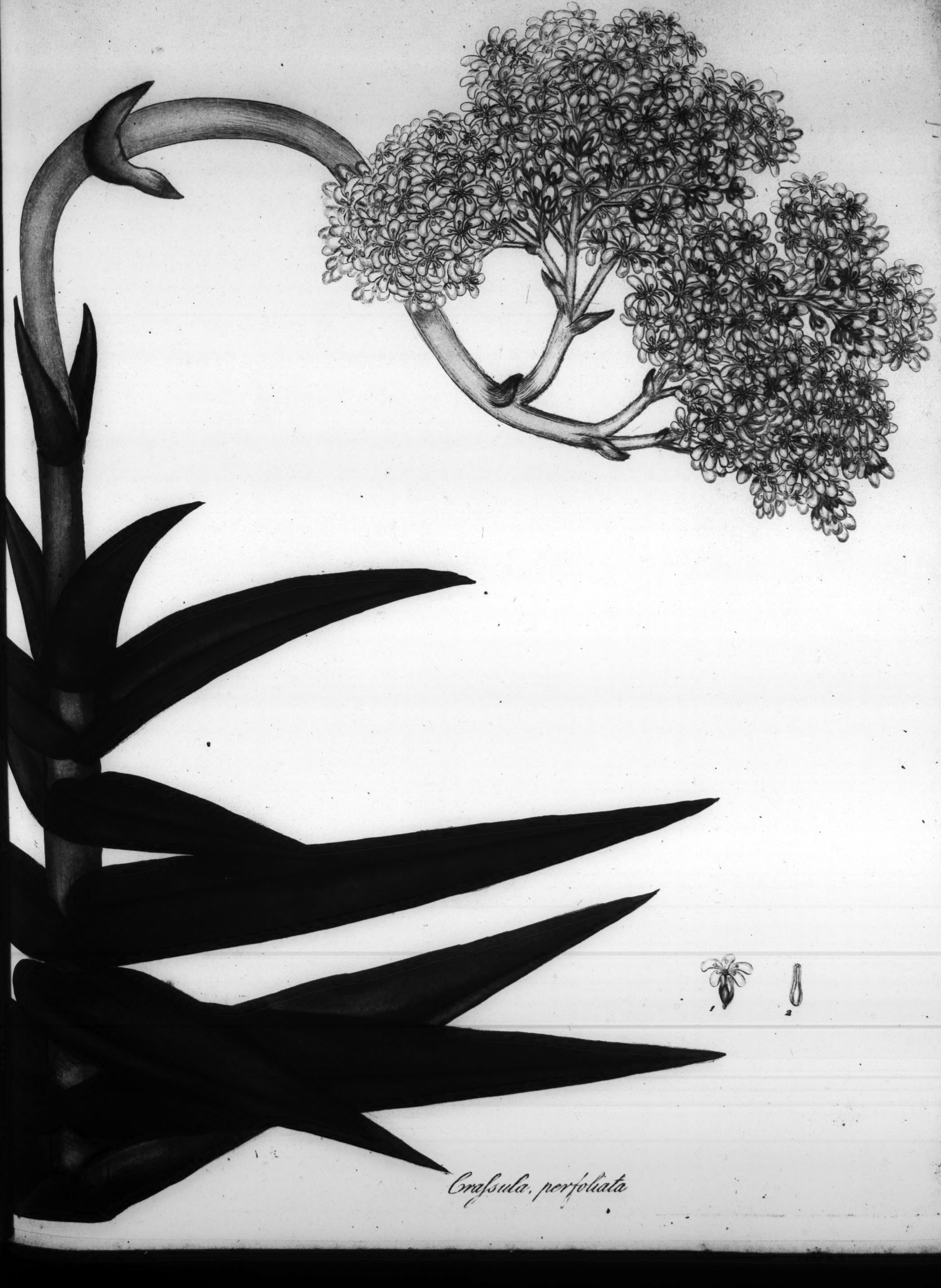
Crassula altissima: foliis subulatis, crassis, amplexicaulibus, subtus convexis, glaucis.	**Crassula** with a tall stem: leaves awl-shaped, thick, and surrounding the stem, convex beneath, and of a sea-green colour.

REFERENCE TO THE PLATE.

1. A flower.
2. The pointals.

Of this species of Crassula we know of no other figure extant, but a very small uncoloured one in the Hortus Elthamensis of Dillenius. Our specimen was taken from the hot stove of the Countess de Vandes, where it flowered for the first time in this country in 1809—in size and grandeur like the C. obliqua, with an equal profusion of blossoms, and bending down as if the weight of the terminal mass of flowers was too much for the stem to support; which we do not consider as the positive character of it, but only arising from the situation in which it stood; being too near the glass, which most likely drew too much of its strength out in length of stalk, and in all probability occasioned the loss of the plant, as it damped off very soon after flowering.

Pl. 986.



Craſsula, perfoliata

PLATE DCLVII.

PASSIFLORA LUNATA.

Crescent-leaved Passion-flower.

CLASS XX. ORDER V.

GYNANDRIA PENTANDRIA. Chives on the Pointals. Five Chives.

ESSENTIAL GENERIC CHARACTER.

TRIGYNIA. Calyx 5-phyllus. Petala 5. Nectarium coroniforme. Bacca pedicellata.	THREE styles. Cup 5-leaved. Petals 5. Honey-cup forming a crown. Berry standing on a footstalk.

SPECIFIC CHARACTER.

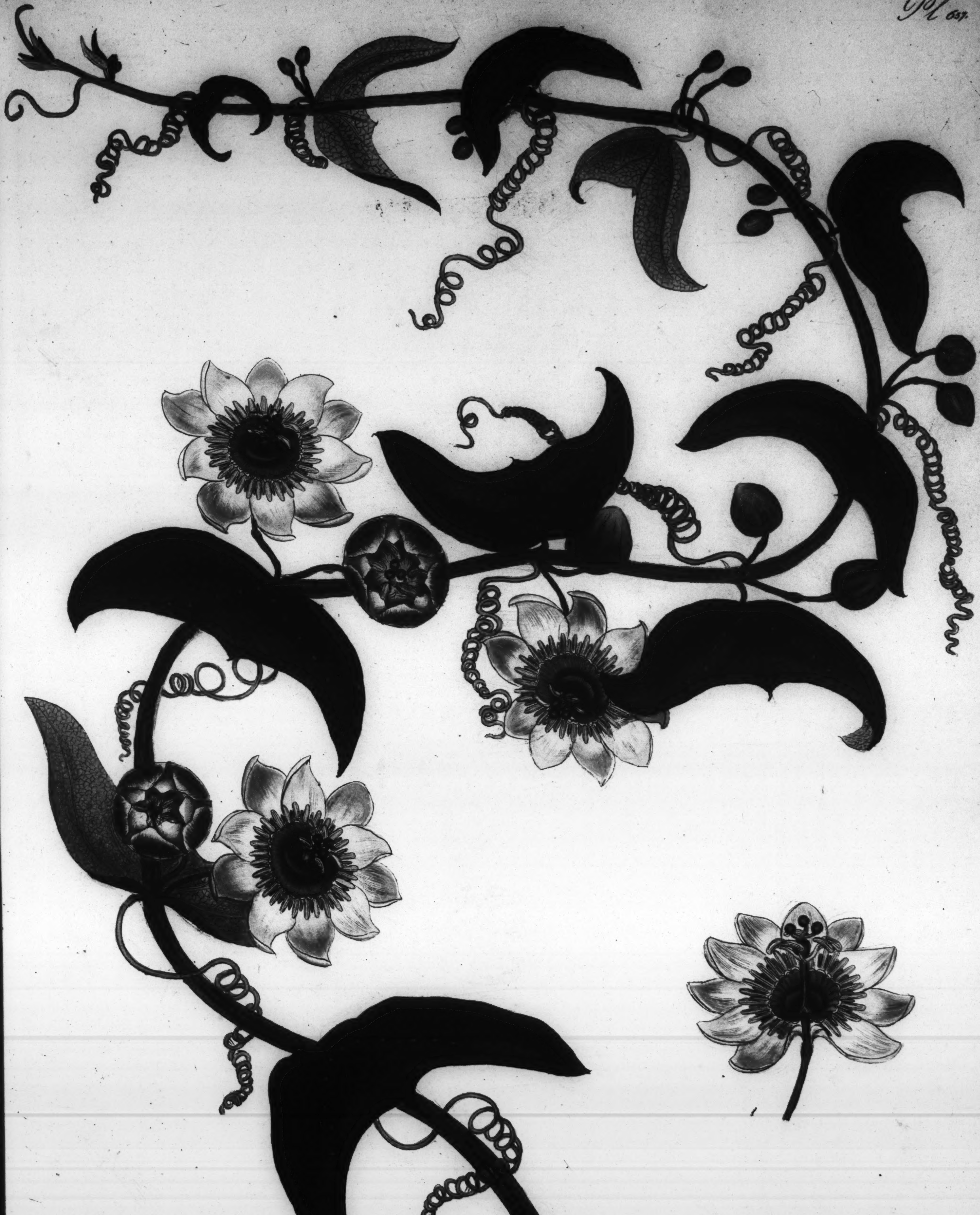
PASSIFLORA floribus axillaribus, binis : foliis lunatis : flore parvo, albo : fructu succulento, ovato.	PASSIFLORA. Flowers axillary, by twos : leaves crescent-formed ; flower small and white : fruit oval and succulent.

REFERENCE TO THE PLATE.

1. A flower spread open.

THIS Passiflora is (like every one of the genus) a graceful meandering plant, and calculated to make an ugly wall look beautiful. It bears an abundant succession of delicate small flowers, which are fragrant, and open early in the day, and during the summer and autumnal months is a great ornament to the hot stove. Our drawing was made from the collection of the Countess de Vandes at Bayswater.

Pl 637.



Paſsiflora lunata

Pub.d as the Act Directs Oct. 1. 1810
by H. Andrews 5 Knightsbridge

PLATE DCLVIII.

STYLEDIUM GRAMINIFOLIUM.

Grass-leaved Styledium.

CLASS XX. ORDER II.

GYNANDRIA DIANDRIA. **Chives on the Pointals. Two Chives.**

ESSENTIAL GENERIC CHARACTER.

Calyx bilabiatus. Cor. tubulosa, irregulariter 5-partita, laciniis interioribus tripartitis. Capsula bilocularis, bivalvis, polysperma.	**Empalement** two-lipped. Blossom tubular, irregularly 5-parted: segments of the interior 3-parted. Capsule two-locular, two-valved, many-seeded.

SPECIFIC CHARACTER.

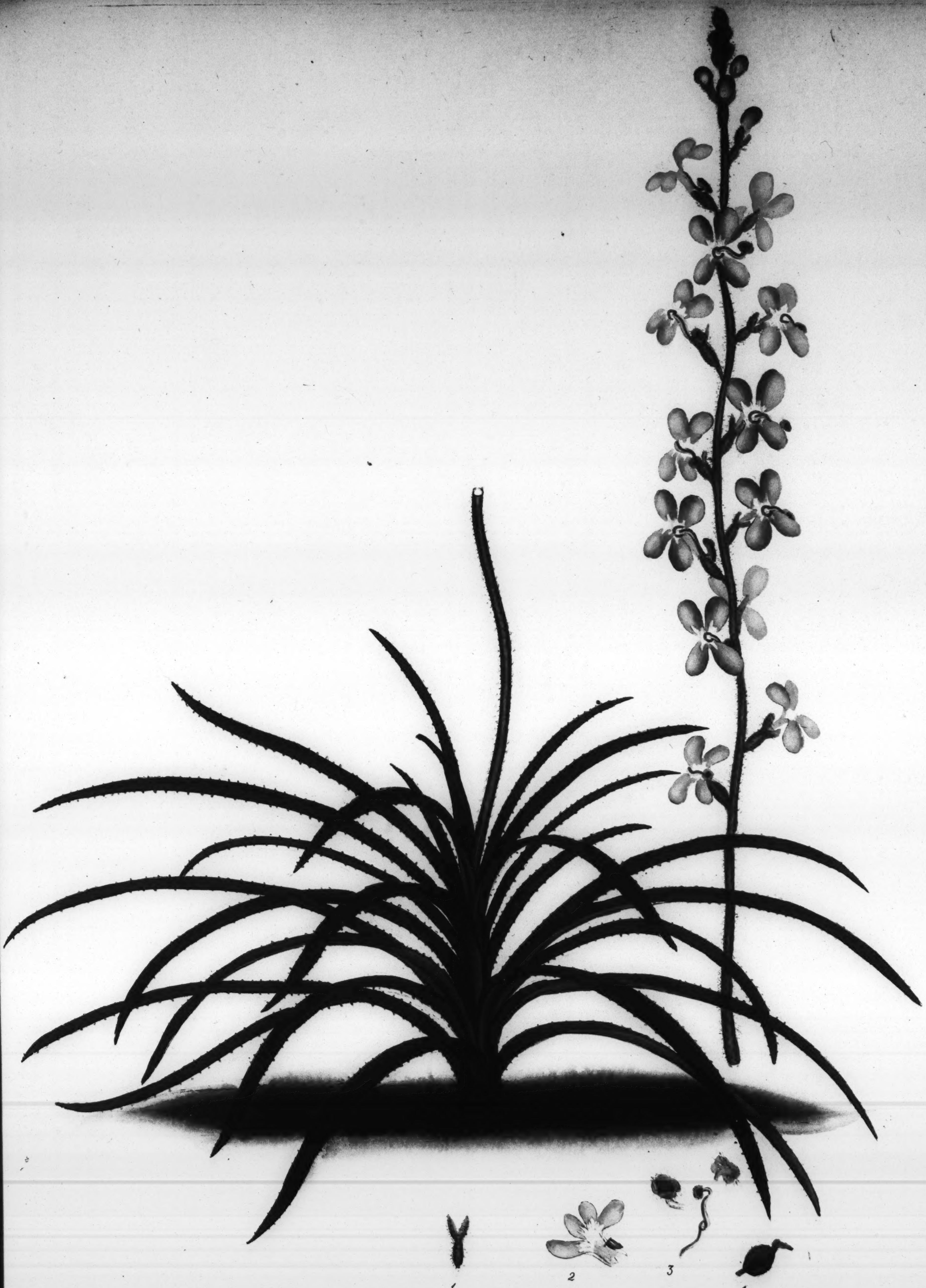
Styledium foliis radicalibus lineari-lanceolatis: floribus spicatis: corollis 4-partitis. *Swartz. Nov. Act. Soc. Natur. Scrut. Berol. vol.* 5. *fig.* 1. *Billardiere, Nova Hollandia, tab.* 215.	**Styledium** with radical leaves linear and lance-shaped: flowers grow in spikes: blossom 4-parted.

REFERENCE TO THE PLATE.

1. The empalement.
2. A blossom spread open.
3. Chives and pointals, summmit magnified, both from the upper and under surface.
4. A half-ripe seed-vessel.

This curious genus, in its style of action, displays an appearance of locomotive power superior to the Mimosas; for, whilst they shrink from the touch, this boldly comes forward with singular elasticity; and although it may not exceed in beauty, it certainly possesses a more moving power than the utmost grace and beauty of other plants can boast. Like most of the productions of New Holland, it bears a strict appearance, and is seen to most advantage in a plant about three years old, such as our figure represents, as it flowered for the first time in this country at the Hammersmith nursery.

Pl.658.



Styledium, graminifolium

PLATE DCLIX.

LOBELIA FULGENS.

Refulgent-flowered Lobelia.

CLASS XIX. ORDER VI.

SYNGENESIA MONOGAMIA. Tips united. Flowers simple.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-fidus. Corolla 1-petala, irregularis. Capsula infera, 2- seu 3-locularis.	**Cup** 5-cleft. Blossom 1-petalled, irregular. Capsule beneath, 2- or 3-celled.

SPECIFIC CHARACTER.

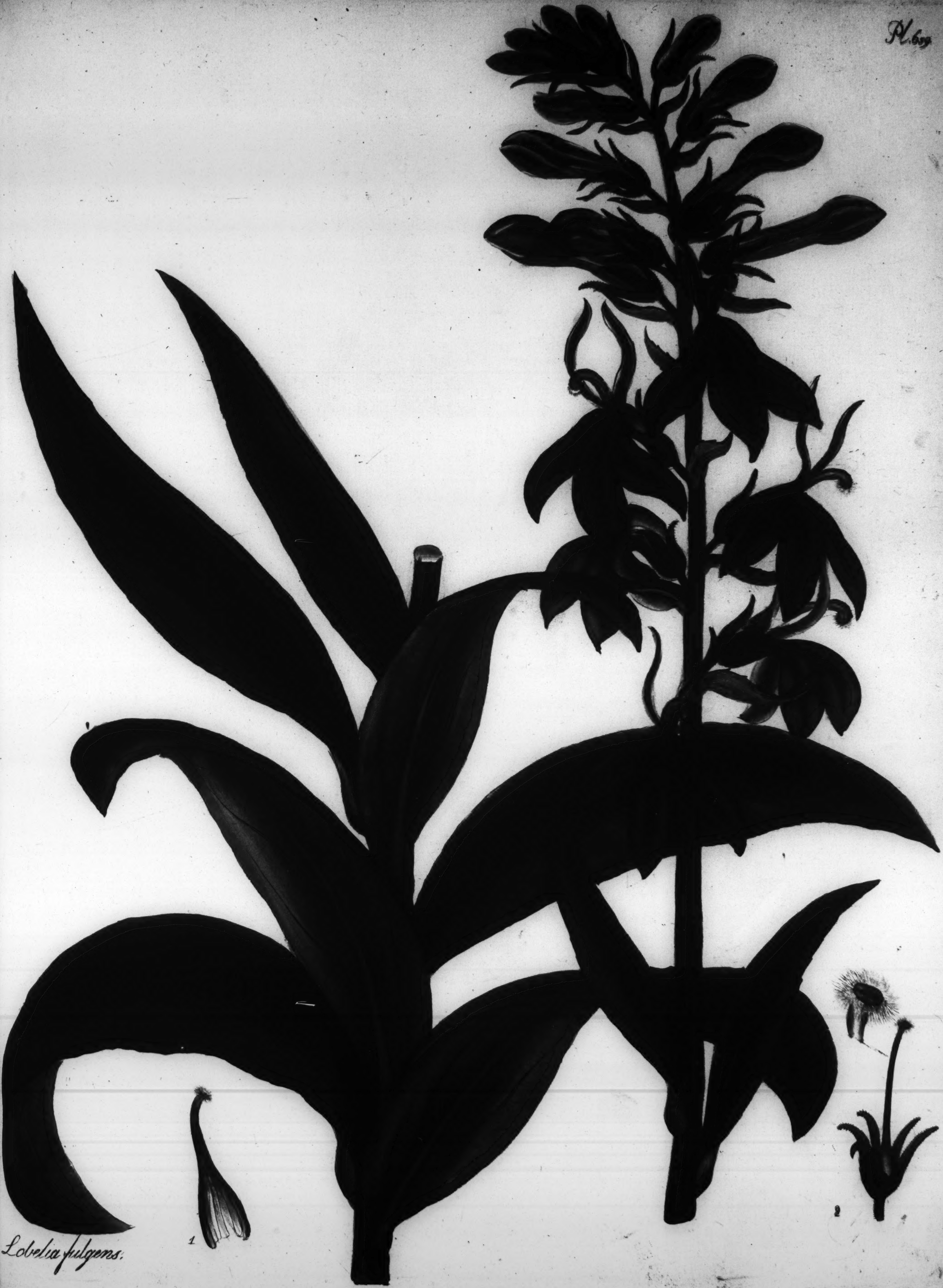
Lobelia foliis lanceolatis obsolete denticulatis, supra tomentosis, glabris, subtus lucidis: racemis compositis, terminalibus.	**Lobelia** with lance-shaped leaves obscurely toothed, downy on the upper surface, smooth, and shining beneath: the racemes compound and terminal.

REFERENCE TO THE PLATE.

1. The chives.
2. Empalement and pointal, summit magnified.

Amongst the Lobelias, this elegant species claims altogether precedence; superior in colour even to the L. cardinalis, large in its flowers, tall in growth, and so easily cultivated that their abundance and beauty will ensure them admission into every collection. Our figure was made from a plant in the collection of J. Vere, Esq. in the summer of 1810. It was raised from Botany Bay seed at the Hammersmith Nursery in 1809.

Pl. 659



Lobelia fulgens.

PLATE DCLX.

CAMELLIA JAPONICA. *Var. flore pleno roseo.*

Rose-coloured Camellia.

CLASS XVI. ORDER VI.

MONADELPHIA POLYANDRIA. Threads united. Many Chives.

ESSENTIAL GENERIC CHARACTER.

Calyx imbricatus, polyphyllus: foliolis interioribus majoribus.	**Empalement** tiled, many-leaved: the inner leaves the largest.

SPECIFIC CHARACTER.

Camellia floribus roseis: petalis exterioribus magnis, patentibus: interioribus parvis, erectis: foliis latis, nitidis.	**Camellia** with rose-coloured flowers: the outer petals are large and spreading: the inner ones small and upright: the leaves broad and shining.

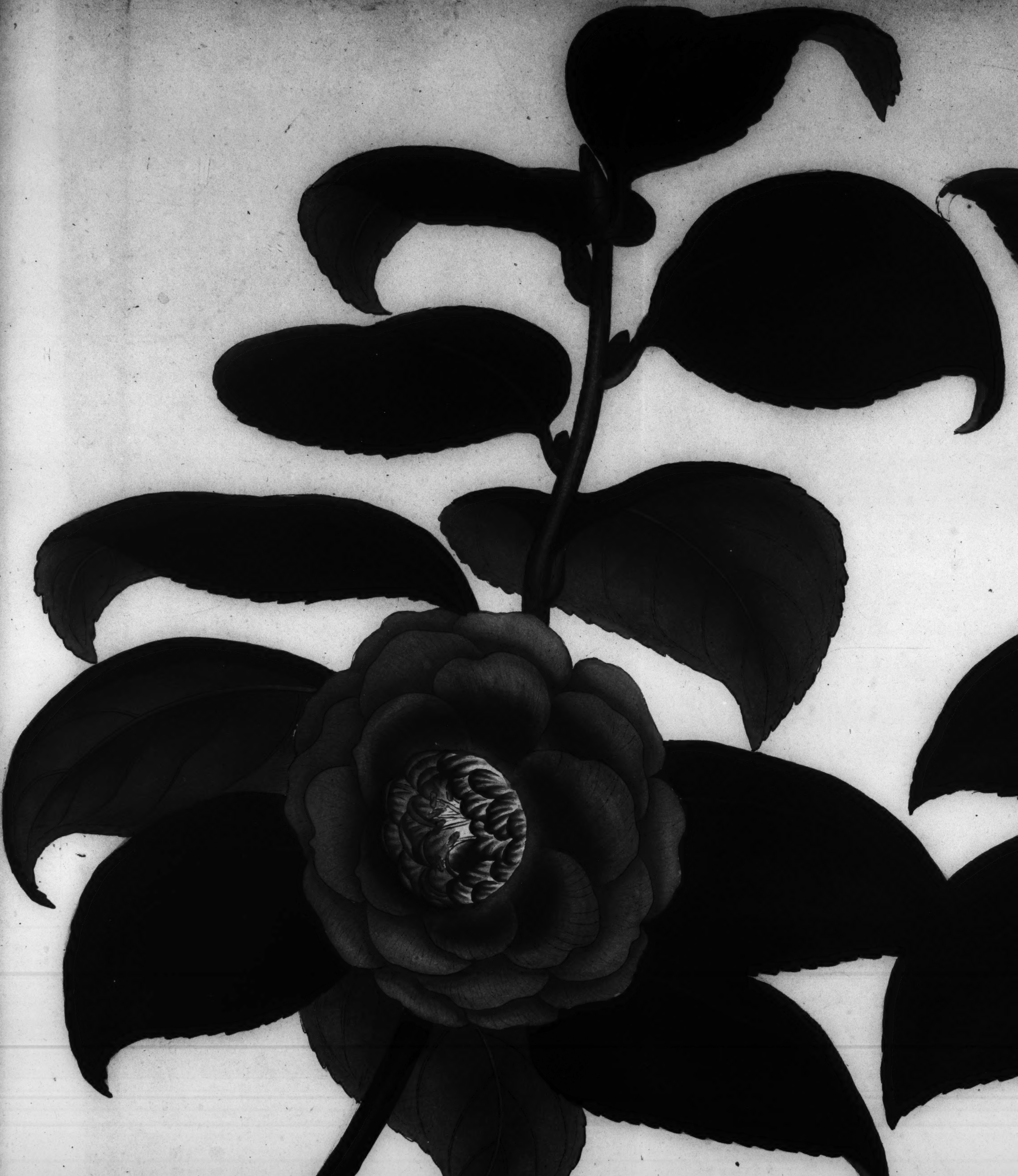
CAMELLIA JAPONICA. *Var. flore pleno incarnato.*

Flesh-coloured Camellia.

SPECIFIC CHARACTER.

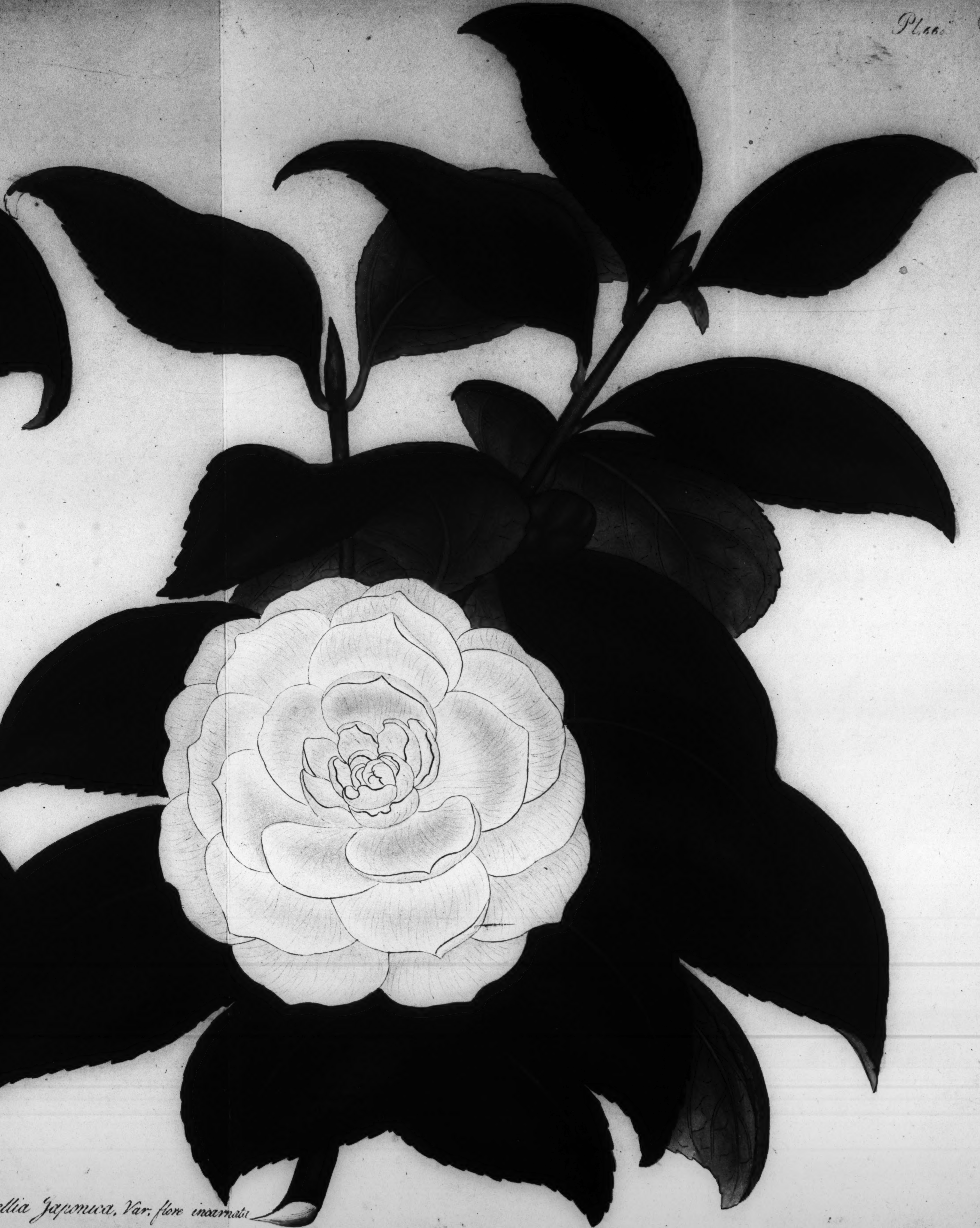
Camellia foliis conspicuè nervosis: floribus petalis numerosis, pallide carneis.	**Camellia** with leaves strongly nerved: flowers with numerous petals, of a pale flesh colour.

So high in estimation is every variation of the Camellia Japonica, that even a new and rare plant is not considered more interesting, nor of so much value as one of these beautiful varieties; the number of which is now extended to sixteen, at least so enumerated by cultivators, and all considered as perfectly distinct. The rose-coloured variety was introduced to the royal gardens at Kew about 1808, and the pale variety was first cultivated in the conservatory of the late Lady Amelia Hume, we believe, in 1806. It is nearly allied to the white, and in severe winters so little colour is visible, that Mrs. Beaumont (with whom this flowered last December at Bretton Hall) informed me it was only by comparing it with the white that it could positively be said to possess any colour; but, upon comparison, a blush was evident. So delicate a test is only requisite in rigid seasons from the want of sun. Both these varieties flower from December till March.



amellia Japonica, Var. flore rosea

Camellia Japon



ellia Japonica. Var. flore incarnato

PLATE DCLXI.

MIMULUS LUTEUS.

Yellow-flowered Mimulus.

CLASS XIV. ORDER II.

DIDYNAMIA ANGIOSPERMIA. Two Chives longer. Seeds covered.

ESSENTIAL GENERIC CHARACTFR.

Calyx prismaticus, 5-dentatus. Corolla ringens, labio superiore lateribus replicato. Stigma crassum. Capsula bilocularis, polysperma.	**Empalement** prismatical, 5-toothed. Blossom ringent, the upper lip folded back at the sides. Shaft fleshy. Seed-vessel two-celled, many-seeded.

SPECIFIC CHARACTER.

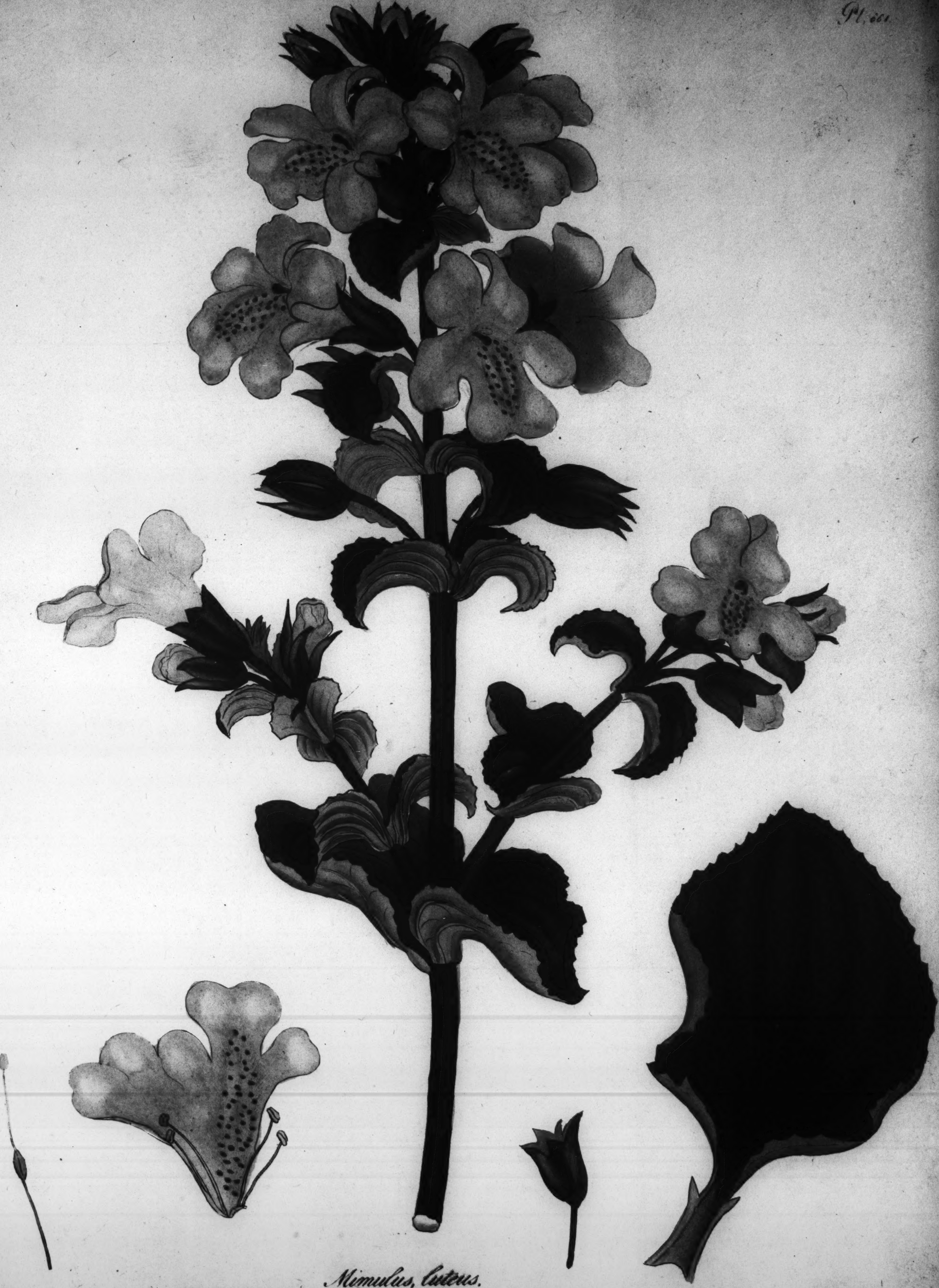
Mimulus foliis subcordatis, multi-nervosis, dentatis.	**Monkey-flower** with nearly heart-shaped leaves, many-nerved and toothed.
Habitat in Peru.	Native of Peru.

REFERENCE TO THE PLATE.

1. A radical leaf.
2. The empalement.
3. A blossom spread open.
4. Seed-bud and pointal.

The Mimulus luteus flowers the same year it is sown, like an annual; but from its habit and manner of throwing out round the base of the flowering stem prostrate branches, which take root, and from the extremities of some of them other flowering stems shooting up, we are inclined to think it biennial. It was long ago described and figured by Father Feuillée in his Flora Peruviana, and quoted from him by Linnæus, who inserted it in his Species Plantarum under the specific title of luteus. It flowers in the autumnal months, and enlivens the borders with its successively numerous bright yellow blossoms; is easily propagated by seeds; and, according to Donn's Catalogue, was introduced in the year 1812.

Pl, 661



Mimulus, luteus.

PLATE DCLXII.

CAMELLIA JAPONICA. *Var. petalis plicatis.*

Plicate-petalled or Warratta Camellia.

CLASS XVI. ORDER VI.

MONADELPHIA MONOGYNIA. Threads united. Many Chives.

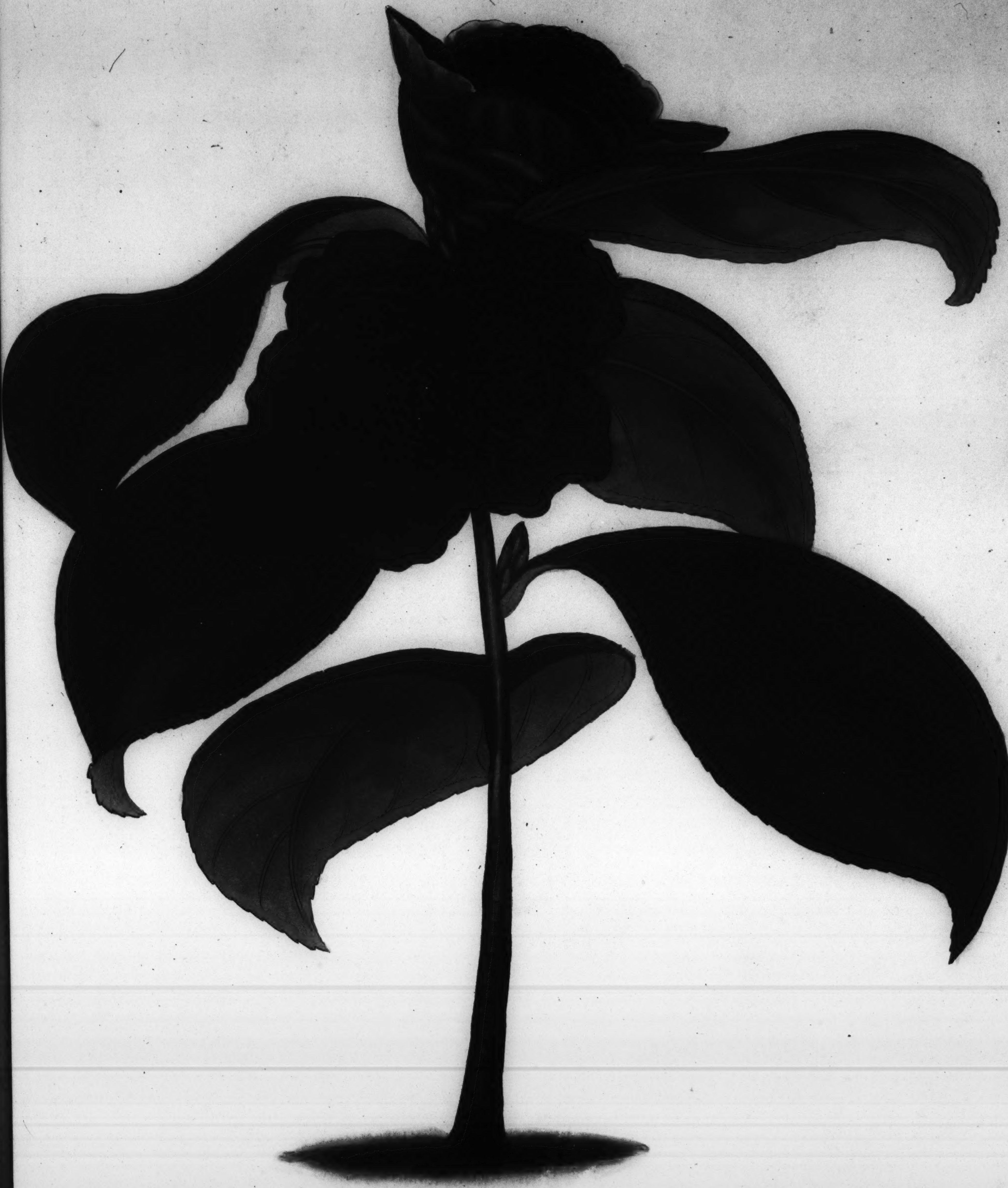
ESSENTIAL GENERIC CHARACTER.

Calyx imbricatus, polyphyllus: interioribus majoribus.	**Empalement** tiled, many-leaved; the inner ones the largest.

SPECIFIC CHARACTER.

Camellia foliis lato-lanceolatis apice reflexis, nitidissimis: corollis rubris, fulgentibus: petalis quinque exterioribus magnis, patentibus: interioribus numerosis, parvis, plicatis, erectis.	**Camellia** with broadly lance-shaped leaves reflexed at the end, very shining: blossoms red and brilliant: the five outer petals are large and spreading; the inner ones are numerous, small, folded together, and upright.

The flowers of this Camellia very much resemble those of the genus Anemone, and it is certainly the most distinct variety at present known. By cultivators it is denominated the Warratta Camellia, from the brilliance of its flowers resembling the Embothrium speciosum, or Warratta. Our drawing was made from a plant in the conservatory of Mr. Alnutt of Clapham Common, where it flowered in February 1813 in great perfection. It also blossomed again last winter, but, from the severity of the season, inferior in colour, and much reduced in size.



amellia, Japonica,
Var. petalis plicatis.

PLATE DCLXIII.

LILIUM CONCOLOR.

Self-coloured Lily.

CLASS VI. ORDER I.

HEXANDRIA MONOGYNIA. Six Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Corolla 6-partita, campanulata. Nectarium linea longitudinalis. Capsulæ valvæ pilis cancellatis connexæ.	Blossom 6-parted, bell-shaped. Nectary a longitudinal line. Valves of the seed-pod connected with a lattice-work of hair.

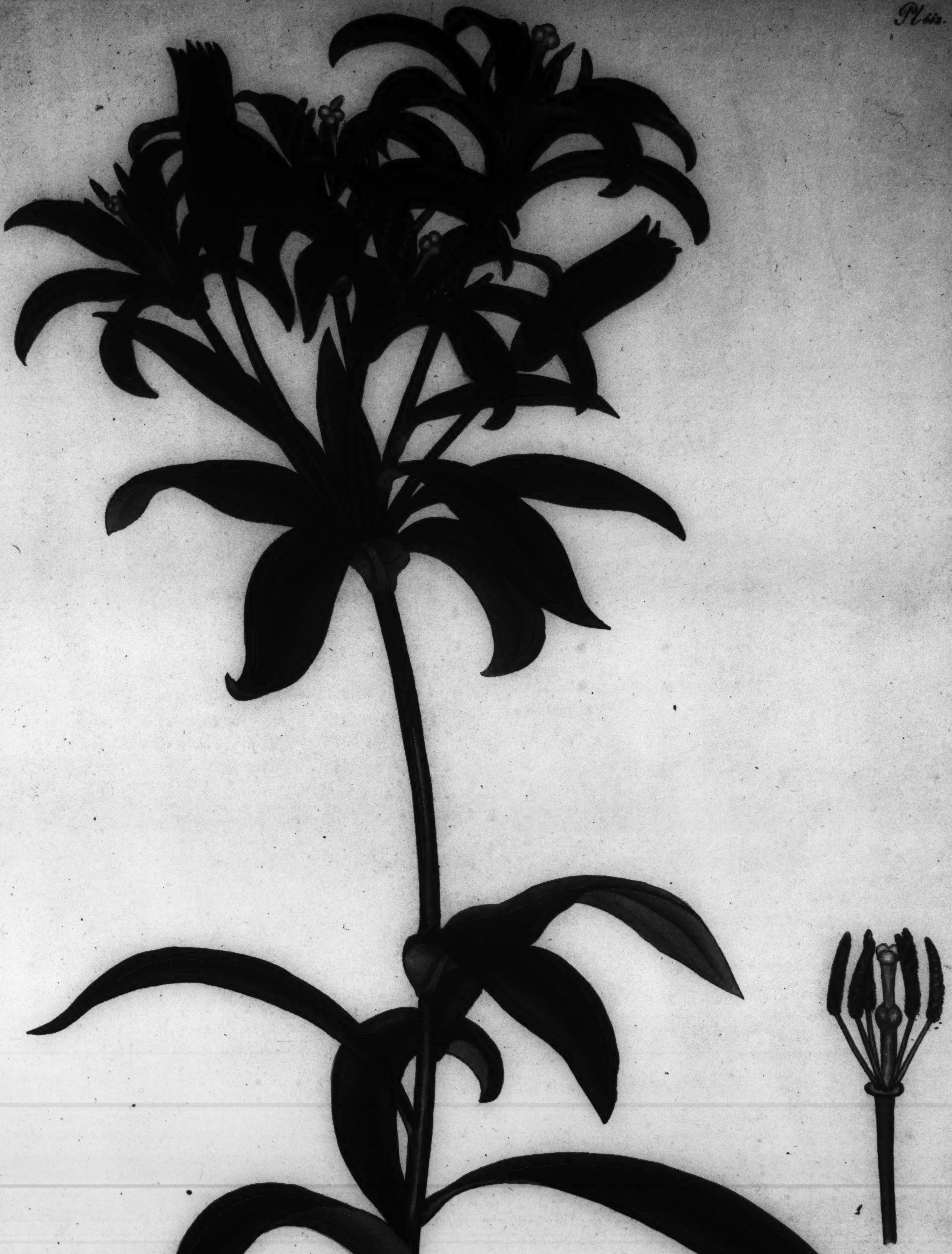
SPECIFIC CHARACTER.

Lilium foliis sparsis, subverticillatis, lanceolatis: floribus erectis, fasciculis terminalibus 3—6-floris: petalis recurvis, patentibus: stylo brevissimo.	Lily with scattered leaves, nearly in whorls, and lance-shaped: flowers upright, in terminal bunches of 3—6 flowers: petals recurved and spreading. Shaft very short.

REFERENCE TO THE PLATE.

1. Chives and pointal.

The Lilium concolor was first raised in the conservatory of the late Sir Charles Greville at Paddington in 1806, and still continues to be one of the rarest of this showy genus. Our figure was made from a plant in the nursery of Messrs. Lee and Kennedy, late in the autumn of 1813. Of what country it is a native is not positively known, but it is supposed to be of Chinese origin.



Lilium, concolor

PLATE DCLXIV.

ARBUTUS LONGIFOLIA.

Long-leaved Arbutus.

CLASS X. ORDER I.

DECANDRIA MONOGYNIA. Ten Chives. One Pointal.

ESSENTIAL GENERIC CHARACTER.

Calyx 5-partitus. Corolla ovata, basi pellucida. Bacca 5-locularis.	Empalement 5-parted. Blossom egg-shaped, transparent at the base. Berry 5-celled.

SPECIFIC CHARACTER.

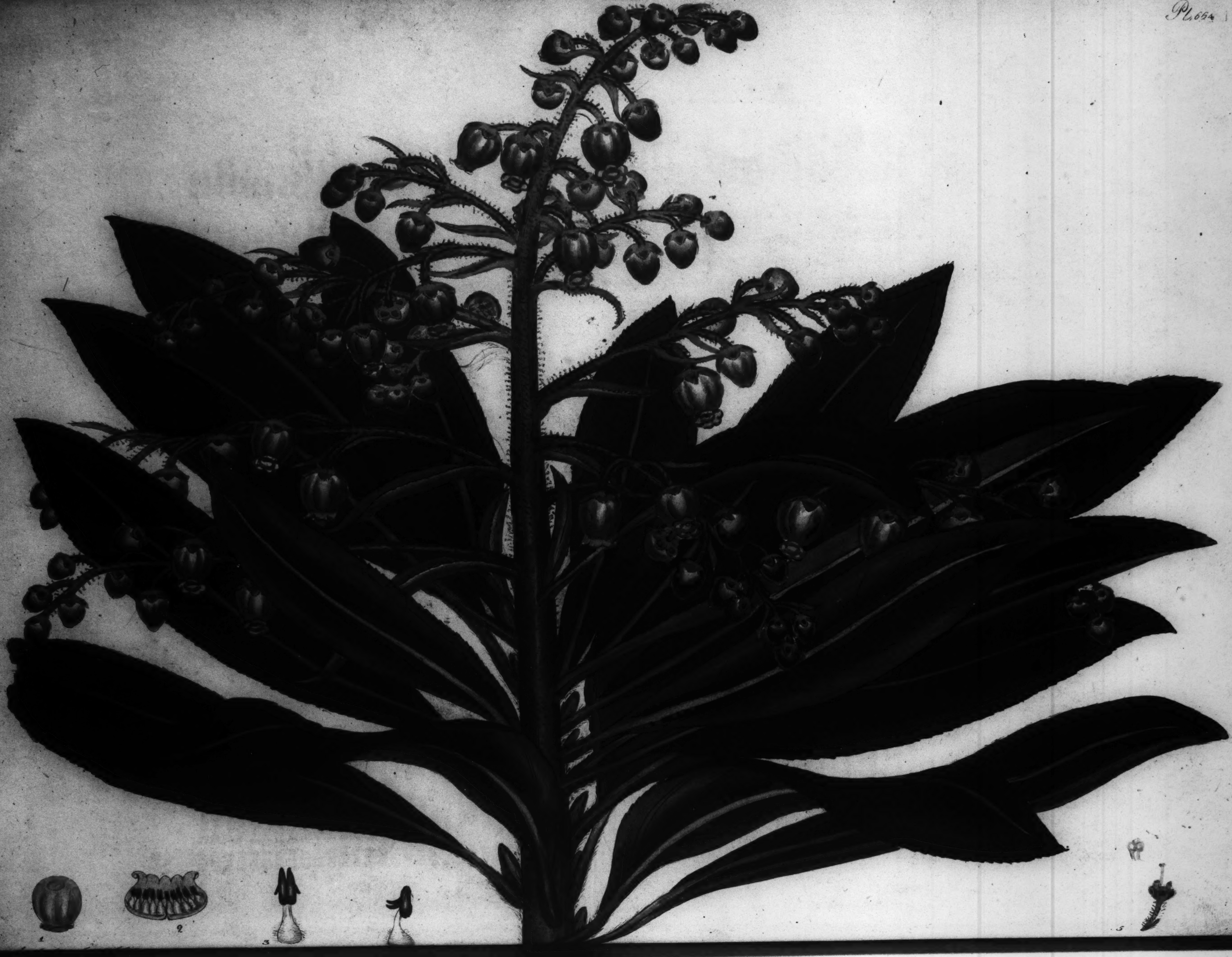
Arbutus foliis longis, lanceolatis, serratis: floribus paniculis verticillatis: pedunculis hispidis, glutinosis: caule arboreo.	Arbutus with long lance-shaped leaves, sawed: flowers grow in panicles, whorled: footstalks hispid and glutinous: stem woody.

REFERENCE TO THE PLATE.

1. A blossom.
2. The same spread open.
3. A chive magnified.
4. A side view of the same magnified.
5. Seed-bud and pointal, summit magnified.

Our drawing of the Arbutus longifolia was made from a fine specimen, obligingly communicated by Mrs. Beaumont, from the superb collection of Colonel Beaumont at Bretton Hall, in March 1814, whose gardener, Mr. Benning, informs us that it is kept in the conservatory, is eleven feet high, bears eight heads of flowers like the one figured, and sheds the old bark annually. It was first raised at the Hammersmith nursery from seeds received from the Island of Madeira. It is also said to be found in the Canary Isles, where the berries are made into a sweetmeat. Although sixteen years in cultivation with us, it has very rarely flowered. May be increased by cuttings or layers.

Pl. 654



G.R. III.
BRITISH MUSEUM

I N D E X

TO THE PLANTS CONTAINED IN VOL. X.

Plate	609	Citrus medica, *odoratissima*	Bergamot Lemon	H. H.	Shrub.	May.
	610	Ruellia formosa	Beautiful Ruellia	H. H.	Shrub.	June.
	611	Daviesia corymbosa	Corymbed Daviesia	G. H.	Shrub.	August.
	612	Pæonia albiflora, *flore pleno*	Tartarian Pæony, *double-flowered variety*	G. H.	Shrub.	August.
	613	Ipomæa pendula	Pendulous Ipomæa	G. H.	Shrub.	July.
	614	Fumaria nobilis	Noble Fumitory	Har.	Herb.	May.
	615	Globba purpurea	Purple Globba	H. H.	Herb.	May.
	616	Euphorbia epithymoides	Broad-leaved Spurge	H. H.	Shrub.	May.
	617	Euphorbia meloformis	Melon-shaped Euphorbia	H. H.	Bulb.	July.
	618	Anneslea spinosa	Armed Indian Water Lily	H. H.	Aquatic.	September.
	619	Eugenia Zeylanica	Ceylon Eugenia	H. H.	Shrub.	August.
	620	Schinus dentata	Toothed Schinus	Har.	Shrub.	September.
	621	Jussieua exaltata	Tall Jussieua	H. H.	Shrub.	August.
	622	Leptospermum scoparium	New Zealand Tea	G. H.	Tree.	June.
	623	Ardisia elegans	Elegant Ardisia	G. H.	Shrub.	August.
	624	Lotus australis	Southern Lotus, or Bird's Foot Trefoil	G. H.	Shrub.	August.
	625	Barleria eristata	Crested Barleria	H. H.	Shrub.	September.
	626	Geodorum citrinum	Lemon-coloured Geodorum	H. H.	Shrub.	October.
	627	Begonia Evansiana	Evans's Begonia	H. H.	Shrub.	October.
	628	Clerodendrum pyramidale	Pyramidal Clerodendrum	H. H.	Shrub.	October.
	629	Desmanthus natans	Floating Desmanthus, or Aquatic Sensitive	H. H.	Aquatic.	September.
	630	Ardisia littoralis	Seaside Ardisia	G. H.	Shrub.	November.
	631	Styrax officinale	Storax Tree	Har.	Tree.	June.
	632	Cytisus elongatus	Elongated Cytisus	G. H.	Shrub.	May.
	633	Liatris odoratissima	Sweet-scented Liatris	H. H.	Shrub.	July.
	634	Peliosanthes humilis	Humble Peliosanthes	G. H.	Shrub.	August.
	635	Celosia cernua	Nodding Celosia	G. H.	Annual.	August.
	636	Ipomæa insignis	Magnificent Ipomæa	G. H.	Shrub.	August.
	637	Trichilia odorata	Sweet-scented Trichilia	H. H.	Shrub.	July.
	638	Daviesia latifolia	Broad-leaved Daviesia	G. H.	Shrub.	April.
	639	Carex Fraseri	Fraser's Carex	Har.	Shrub.	September.
	640	Heliconia Bihai	Wild Plantain Tree	H. H.	Herb.	April.
	641	Prostanthera lasianthos	Downy-flowered Prostanthera	Har.	Shrub.	June.
	642	Gompholobium grandiflorum	Large-flowered Air Pod	G. H.	Shrub.	June.
	643	Justicia bicolor	Two-coloured flowered Justicia	H. H.	Shrub.	June.
	644	Lobelia Speculum	Lobel's Venus's Looking-glass	G. H.	Annual.	August.
	645	Epidendrum fragrans	Sweet-scented Epidendrum	H. H.	Herb.	September.
	646	Protea radiata	Radiated Protea	G. H.	Shrub.	August.
	647	Androsace coronopifolia	Buck's Horn Plaintain-leaved Androsace	Har.	Annual.	July.
	648	Crotalaria Saltiana	Salt's Crotalaria	H. H.	Shrub.	July.
	649	Alstromeria edulis	Eatable Alstromeria	H. H.	Shrub.	September.
	650	Xeranthemum fasciculatum, *var. flore rubro*	Bundled-leaved Everlasting Flower, *red-fl. variety*	G. H.	Shrub.	July.
	651	Cymbidium Andersonii	Anderson's Cymbidium	H. H.	Herb.	August.
	652	Xeranthemum humile	Low-growing Xeranthemum	G. H.	Shrub.	September.
	653	Corræa speciosa	Showy Corræa	G. H.	Shrub.	September.
	654	Gnaphalium eximium	Showy Gnaphalium	G. H.	Shrub.	August.
	655	Cerbera Manghas	Poisonous-fruited Cerbera	H. H.	Shrub.	September.
	656	Crassula perfoliata	Perfoliate-leaved Crassula	H. H.	Shrub.	September.
	657	Passiflora lunata	Crescent-leaved Passion Flower	H. H.	Shrub.	August.
	658	Styledium graminifolium	Grass-leaved Styledium	G. H.	Shrub.	September.
	659	Lobelia fulgens	Refulgent-flowered Lobelia	G. H.	Shrub.	August.
	660	Camellia Japonica, *var. rosea et incarnata*	Camellia Japonica, *rose and flesh coloured varieties*	G. H.	Shrub.	February.
	661	Mimulus luteus	Yellow-flowered Mimulus	Har.	Herb.	September.
	662	Camellia Japonica, *var. petiolis plicatis*	Camellia Japonica, *plicate-petalled variety*	G. H.	Shrub.	February.
	663	Lilium concolor	Self-coloured Lily	Har.	Bulb.	September.
	664	Arbutus longiflora	Long-leaved Arbutus	G. H.	Shrub.	April.

ERRATA.

Justicia bicolor, for 663, read 643.

Plate 649, description, line 7. for Cape of Good Hope, read Cape Francois; and in the last line, for it is indigenous, read they are indigenous.

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